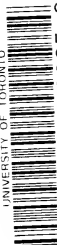


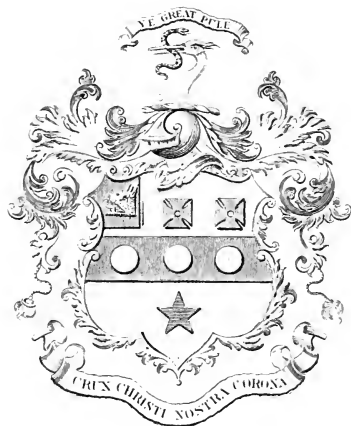
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A SHORT HISTORY OF
ST. BARTHOLOMEW'S
HOSPITAL

1123-1923



THE TOMB OF RAIERE
IN THE
CHURCH OF SAINT BARTHOLOMEW THE GREAT

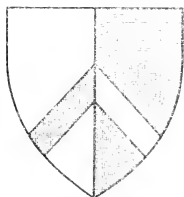
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A SHORT HISTORY OF ST. BARTHOLOMEW'S HOSPITAL

1123-1923

PAST AND PRESENT

BY SIR D'ARCY POWER, K.B.E., F.R.C.S.



THE FUTURE

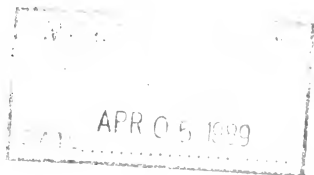
BY H. J. WARING, M.S., F.R.C.S.

LONDON

PRINTED FOR THE HOSPITAL

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PREFACE

 HIS book has been written on the occasion of the celebration of the eight hundredth anniversary of the foundation of St. Bartholomew's Hospital. The short history of the Hospital, forming the first section of the book, is told, as far as possible, in the language of the original records. The readers are assumed to be acquainted with the main facts of the history of the Hospital. It was founded by Rahere, who had recently been admitted an Augustinian or Black Canon, in 1123, during the reign of King Henry I, son of William the Conqueror. The charitable work was continued on a religious basis until 1537 when King Henry VIII seized the revenues at the time of the Dissolution. In spite of this the Hospital maintained a few patients until 1544, when a Royal Charter was obtained on the petition of Sir Richard Gresham, Lord Mayor of London, and father of Sir Thomas Gresham, who built the Royal Exchange. This second foundation, carried out in part upon the old religious lines, proved unsatisfactory. The Lord Mayor with his brethren the Aldermen and the Citizens of London then took the matter into their own hands, obtained a second charter in 1547, and

placed the Hospital on a secular basis. A medical school grew up gradually for the training of students, was formally recognized in 1791, and was known as the Medical School of St. Bartholomew's Hospital from 1830. It flourished as a private enterprise until 1921, when it was incorporated by Royal Charter as "The Medical College of St. Bartholomew's Hospital," and it is now a constituent College of the University of London.

The second part of the book gives some account of the Hospital and its activities at the present time. The third part provides an idea of how the Hospital may be reconstructed to meet modern requirements at some time in the future when the means for so doing are available.

Most valuable help in the preparation of the volume has been given by Mr. Geoffrey Keynes, M.D., F.R.C.S.Eng. He has read the proofs, superintended the production of the illustrations, verified the index, and given unstinted assistance to make the book worthy of the occasion. The Rector of St. Bartholomew-the-Great, the Rev. W. F. G. Sandwith, M.A., has kindly allowed a copy to be made of the pastel drawing of Rahere's tomb by Miss A. M. Bulkley, which forms the frontispiece to the volume. Thanks must also be given to Dr. Herbert Spencer, Dr. J. B. Hurry, Mr. Sidney H. Badcock, Dr. Leonard Mark, and Dr. Edward Cahen for lending some of the engravings and negatives from which the illustrations were made, as well as to the Royal College of Physicians for permission to copy the portrait of Dr. David Pitcairn, and to the President and Council of the Society of Antiquaries for plate 13.

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Much use has been made of The History of St. Bartholomew's Hospital by the late Sir Norman Moore, Bt., M.D. ; of The Records of St. Bartholomew's, Smithfield, by Mr. E. A. Webb ; and of the papers on Our Hospital Pharmacopoeia and Apothecary's Shop by Sir William S. Church, Bt., M.D.

The articles on the Pathological Institute by Sir Frederick Andrewes, F.R.S., and on The Dispensary by Mr. J. Langford Moore, F.C.S., appeared to be so admirable that they have been inserted without alteration.

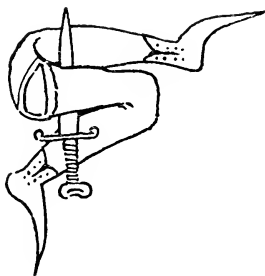
All the plans in the section on "The Future" have been drawn by Mr. T. A. Lodge, A.R.I.B.A., L.F.S.I.

Finally, thanks are due to every member of the Staffs of the Hospital and of the Medical College for their hearty support and ready compliance with all demands made upon them for facts or other information.

D'A. P.

H. J. W.

MARCH 1923.



FROM COK'S CARTULARY



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PART I

THE PAST





THE PAST

THE FOUNDATION

EIGHT hundred years ago English was spoken by the common people, but French was the language of the ruling class. The first Crusade was ended ; the second had not been preached. The Order of the Knights Templars had been established for five years ; the Tower of London was a new building. Parliament had not yet come into being. There were no judges. The King with a Justiciar gave the law, and the Royal Treasure was kept as a hoard at Westminster or at Winchester to be stolen by a thief, or seized by an aspirant to the crown. Eight hundred years ago Thomas à Becket was a boy, five years old, living with his father and mother in a house in the Poultry ; the site is now occupied by the chapel of the Mercers' Company which is dedicated to his memory. Eight hundred years ago the White Ship had just sunk off Harfleur, carrying down with it the heir to the throne—William, the only son of Henry† Beauclerc—and many of the young

nobility, his friends and companions. The event is still commemorated by us, for we believe that it inclined the heart of the King to works of charity and enabled Rahere—our founder—to obtain a grant of the land upon which the hospital is built.

The site was well chosen. A wide open space with the City wall at one side, the clear tidal Fleet river on the other. Close to the highest ground in the City, it had once belonged to Edward the Confessor, but had passed into the hands of the Conqueror, and from him to Henry I his son. It was called "Noman's Land" and was valued at five shillings a year paid to William, as it had been to Edward. The field was used as a playground, and as late as 1300 much of it remained unenclosed. Once in two years the Florentine Guild of Cloth Workers and Dyers brought their matchless dyes from Italy and sold them at the Fair; sometimes, too, there was a horse fair. But the Smooth field (Smithfield) was used for games and horseracing, and there were Horsepool and Todwell, Loderswell and Foxwell, where the children could play and the horses could be watered. The ground was muddy, ill-cared for and cut up by the traffic, so that it was described accurately enough as "a dank and fenny place" by those who wished to depreciate its value to the King, or magnify the services of Rahere. Beneath the trampled surface, however, there was a deep layer of fine river gravel and upon this Rahere built his hospital and convent without further foundation.

The story of the beginning of the hospital can never be



GREAT SEAL OF HENRY I

told better than in the words of the original chronicler which, being modernized, run :

“ Rahere, a courtier though a cleric, decreed himself to go to Rome to do the worthy fruits of penance and, our Lord God directing his pace, came whole and sound whither he purposed, where at the martyrdoms of the blessed Apostles Peter and Paul, he, weeping his deeds and calling to mind the escapades of his youth and ignorance, prayed to our Lord for the remission of them, promising further more none like to do, but this utterly to forsake, promising ever devoutly to obey His will. And when he would perfect his way that he had begun he saw a vision full of dread and sweetness. It seemed to him that he was borne up on high of a certain beast which set him in an high place and, when he from so great a height would inflect and bow down his eyes, he beheld an horrible pit and the deepness of the same pit was deeper than any man might attain to see. Therefore he, knowing his secret faults, deemed himself about to slide into that cruel downcast and he for dread trembled and great cries proceeded out of his mouth. To whom dreading and for dread crying appeared a certain man like in shape the majesty of a King, of great beauty and Imperial authority. Then said he, ‘I am Bartholomew the Apostle of Jesus Christ that came to succour thee in thine anguish, and to open to thee the secret mysteries of heaven. Know me truly by the commandment of the High Trinity and the common favour of the celestial court and council to have chosen a place in the suburbs of London at Smithfield where in my name thou shalt found a Church and

it shall be to the honour of God ; there shall be the tabernacle of the Lamb, the temple of the Holy Ghost. This spiritual house the Almighty God shall inhabit and hallow it and glorify it and His eyes shall be open, His ears listen on this house night and day that the asker in it shall receive and the seeker shall find and the ringer and knocker shall enter. Wherefore do thou boldly ; neither of the costs of the building doubt thee not ; only give thy diligence and my part shall be to provide necessities. Direct, build, and end this work. And therefore of this work know me the master and thyself only the minister. Use diligently thy service and I shall show my lordship.' In these words the vision vanished."

The story is a pretty one, and surely there are few hospitals which can boast so heavenly a foundation, for Rahere established the hospital and priory simultaneously, and ever the two foundations remained distinct, though allied, until at the latter end the hospital has outlasted the convent, and has gained increasing favour both at home and abroad.

It was no light task which was laid upon Rahere, and without a firm faith in Bartholomew he could never have carried it through to a successful ending. When Rahere came home—now an Augustinian canon—"men told him that the chosen site was part of the King's market of the which it was not lawful to princes or other lords of their proper authority anything to minish, neither to so solemn a service to depute. But Rahere addressed himself to the King and the Bishop Richard being present, the which he made favourable to himself beforehand, effectively expressed his business

and meekly besought that he might lawfully bring his purpose to an end. And nigh him was He in whose hands was the King's heart to incline to what he would, and ineffectual those prayers might not be whose author is the Apostle, whose greatest hero was God. His word was pleasant and acceptable to the King's eye and he granted to the petitioner his kingly favour, benignly giving authority to execute his purpose. And he, having the title of desired possession of the King's majesty, was right glad. Then he, nothing omitting of care and diligence, two works of piety began to make; one for the vow that he had made, another as to him by precept was enjoined. The Church he made of comely stonework tablewise and an hospital house a little farther off."

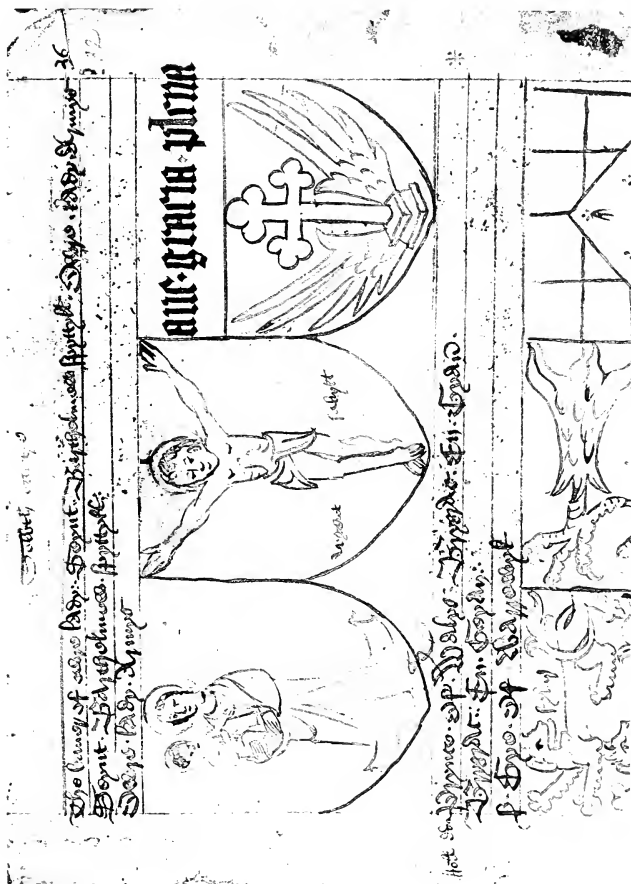
The chosen site as has been said already did not promise much for "this place before the cleansing of it held forth no hope of goodness, right unclean it was and like as a marsh dank and fenny with water everywhere abounding. And what was eminent above the water dry was deputed and ordained to the gibbet or gallows of thieves and to the torment of others that were condemned by judicial authority; yet, truly, when Rahere had applied his study to the purgation of this place and decreed to put his hands to that holy building he was not ignorant of Satan's wiles, for he made and feigned himself unwise for he was so coated, and outwardly pretended the mien of an idiot and began a little while to hide the secretness of his soul, and the more secretly he wrought the more wisely he did his work. Truly in playing-wise and manner he drew forth to him the fellowship of children and

servants, assembling himself as one of them and, with their use and help, stones and other things profitable to the building lightly he gathered together." The tale is instinct with the faith of the time, and the main facts are undoubtedly true, though it does not become us to inquire too closely into its literal accuracy.

OBJECTS OF THE HOSPITAL

The hospital, like the priory, was named after St. Bartholomew and was founded in honour of the exaltation of the Holy Cross. It was designed to give help to the needy, orphans, outcasts, and poor of the district, as well as to afford relief to every kind of sick person and homeless wanderer. The sick poor were to be tended until they recovered, women with child until they were delivered, and if the mother died in hospital the child was to be maintained until the age of seven years. Provision was made for a master, eight brethren, and four sisters, whilst the convent of the neighbouring priory had at first a prior and thirteen canons.

We may feel pretty sure that Rahere selected the first master of the hospital on the lines and with the qualifications required of a master of "the farmery" in the Augustinian monastery. The rule says that "he ought to be gentle, good-tempered, kind, compassionate to the sick and willing to gratify their needs with affectionate sympathy. Further, he ought to have a servant fit for his place, who is to stay continuously in the infirmary and wait upon the sick with



PROCESSIONAL BANNERS USED BY THE HOSPITAL
from a XVIth cent. manuscript

diligence and care in all gentleness. He is to get their food ready at the proper time, show their water to the physician, and take a careful note of how they ought to diet themselves. The master of the infirmary ought to have Mass celebrated daily for the sick, either by himself, or some other person, should they in any wise be able to come into chapel; but if not he ought to take his stole and missal and reverently at their bedsides make the memorials of the day of the Holy Spirit and of Our Lady, and he ought to repeat to them words of consolation, of patience, and of hope in God; read to them for their consolation the lives of the saints; conceal from them all evil rumours, and in no wise disturb them when they are resting. The master ought frequently to take note of their condition; ask them with kindly interest whether they wish for anything, and bestow on them all the consolation and good feeling in his power. Further, in a spirit of fraternal sympathy he should provide a fire on the hearth should the state of the weather require it, a candle, a cresset and a lamp to burn all night, and everything that is necessary, useful, and proper."

The master was usually, but not necessarily, in priest's orders, and of the eight brethren, three were always chaplains to the hospital and all wore the habit. Plate 3, taken from a fifteenth-century manuscript in the British Museum, shows that the hospital had banners for use on Feast Days and on other processional occasions. One seems to have belonged to the Church, the other to the chapel of St. Mary, and the third perhaps to St. Catherine's (*vide* p. 14).

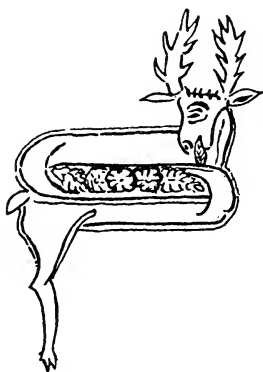
THE EARLY DAYS OF THE HOSPITAL

The hospital was poorly endowed at first, and it was part of the duty of the master and brethren, and of the novices under their charge, to beg and to gather alms by preaching. We hear of Alfune, the founder of St. Giles, Cripplegate, when acting as hospitaler, obtaining malt to make beer for the patients, whilst the adroitness with which he begged has come down to us in the following story: "There was a certain butcher, Goderich by name, a man of great sharpness of temper; he was a mean man, the which not only to the askers would he not give but was wont with scorning words to insult them. It fell upon a day that while Alfune went about the butchers man by man, and after others when he came to this Goderich and besought him in the name of the Apostle with good and honest words opportunely and importunely, because he was not willing to give he persevered steadfastly and would not go from him empty, and when the old man beheld that not for fear nor for the love of God, nor also for shame he might not temper the hardness of that indurate heart from his rigour he broke out in these words: 'O! Thou unhappy, O Thou ungentle and unkind man to the Giver of all good things, that for the gift of heavenly goodness will not help the poor men of Christ. I beseech thee, wretch, put away a little and swage the hardness of that unfaithful soul, and take in experience the virtue of the

glorious Apostle in whom, if thou trust, I promise thee that every piece of thine that thou givest me a portion of shall the sooner be sold to other and without diminishing or lessening the price.' He was moved, not by instinct or inward stirring of charity, but overcome by the importunity of the asker, he drew out a piece of the vilest meat and cast it into his vessel, calling them truants, and bade them quickly leave him. To whom Alfune answered ' I shall not go from thee till my words and promise are fulfilled.' And without delay there was a citizen anxious to buy flesh for him and his household, and of that heap, of the which Alfune spake, he bought at the price of the seller and took it away with him. And when this was made known through all the butchery it was taken for a worthy miracle and from that time they began to be more prompt to give alms, and also fervent in devotion, and strove who might be before the other in giving."

Although much of the food for the hospital was obtained by begging from the charitable and from the uncharitable alike by the personal efforts of the brethren, there was a small but secure provision. It was ordained as early as 1147 that the hospital should have "as heretofore, from the priory the gift of a tithe of bread and the leavings of meat, fish, and drink which it is hoped will be given with greater cheerfulness, if it be possible, and more abundantly." And it was agreed that if the hospital should lack anything in which the convent should abound, or if the house of the hospital should abound in anything which the priory lacked, they should assist each other in turn without reluctance on either side.

So long as Rahere lived the convent and the hospital worked well together, but after his death relations between the two bodies became strained. Appeals were made to Rome, and it was not until 250 years later that the differences were finally composed by the intervention of Bishop Simon of Sudbury in 1373. It was then acknowledged on both sides that the dependence of the hospital on the convent was to be purely nominal.



FROM COK'S CARTULARY

THE HOSPITAL AND ITS SITE



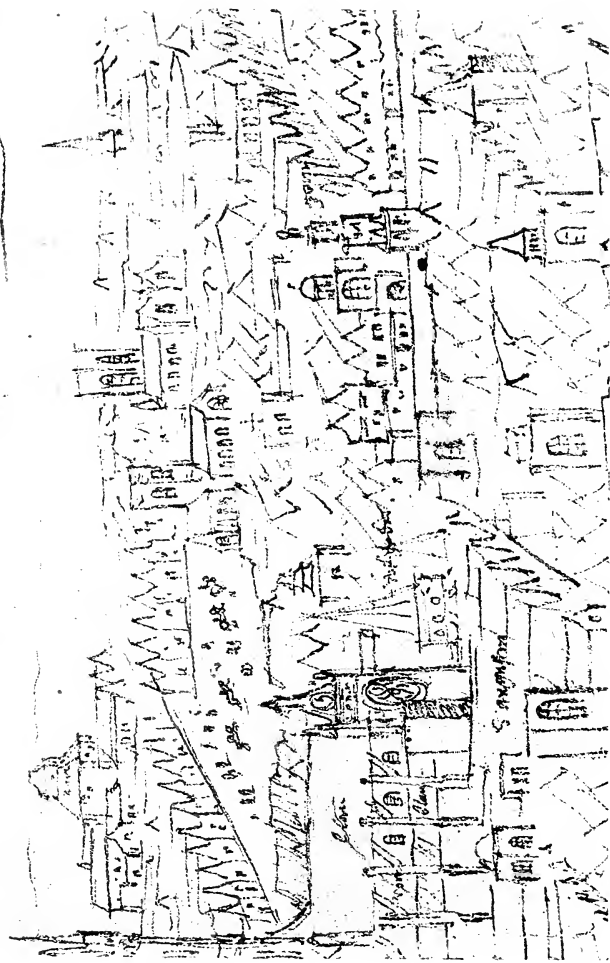
It is worthy of notice that the hospital remains in the exact position in which it was placed by Rahere 800 years ago. King Edward II gave two vacant plots of land in Smithfield in 1326, and the governors of the hospital bought an acre and a half of land belonging to Christ's Hospital when the Bluecoat School moved to Horsham in 1901, but except for these additions the hospital precincts have remained unchanged. We still enter it from Smithfield along the path used by Rahere, and leave it by the Little Britain gate as he must often have done. There used, however, to be two other gates which are now destroyed, the Hartshorn or Giltspur Street gate which stood where the library now stands, and the South or the Tanhouse gate on the site of the present isolation block.

THE EARLY HOSPITAL BUILDINGS.

The hospital of early times must not be thought of as the compact body of buildings known to the present generation. Nothing now remains of the original buildings, nor is it possible to trace them even in outline. For many centuries they were probably scattered wooden structures, white-

washed, and one storey high. Interspersed among these buildings were dwelling houses and shops, some of which had gardens whilst others were grouped irregularly into the semblance of a street upon either side of a passage known as Bartholomew Lane, running from Smithfield to Little Britain. In addition to the scattered buildings there was a hall in which were beds for the patients, with a central fireplace and an altar so placed that it was visible to the patients as they lay in their beds. Before this altar benefactors had given money to maintain a lamp, and their good deed was commemorated daily. We know that a fire was kept in the hall for, in 1223 and again in 1224, King Henry II ordered Engelard de Cicogny to give to the patients of St. Bartholomew's Hospital in London as "our gift one old oak from our forest of Windsor on the Thames with the least possible injury to our forest and the greatest use to the aforesaid patients for their hearth."

Originally a chapel stood in the centre of the hospital, but as early as 1184 Pope Lucius granted a faculty for its transfer to a more suitable place and instructed the Bishop of London to consecrate it when rebuilt without raising any objection. It was no doubt rebuilt on the site of the present church, the tower of which appears to be of the twelfth century and still shows the bricked-up doorways by which it was connected with the lodging of the master of the hospital. This church was dedicated originally to the exaltation of the Holy Cross. The chapel of St. Mary opened into it, and the chapel of St. Catherine was within it. There was also a



SMITHFIELD IN TUDOR TIMES
from H. Yngard's Map of London

chapel of St. Nicholas adjoining the South gate and there was another chapel near the Little Britain gate dedicated to St. Andrew. Patients and staff were buried at first in the priory cemetery, but in 1191 Pope Calixtus III enlarged on the necessity of a separate burial-ground "on account of the multitudes of those who sojourn in the house of your hospital and the excessive distance of your cemetery through the horse-market and muddy streets, the labour entailed on those brethren and servants in your house who apply themselves to conducting funerals is recognized in these days to have grown to vast proportions." Perhaps the Holy Father had been misinformed, or the distance had been exaggerated during the long journey to Rome, for the convent cemetery was only on the other side of the road. Considerable fees, however, were derived from those rich and pious citizens who desired, in token of humility, to be buried amongst the poor, so it was worth while to have a cemetery of one's own. In addition to this large cemetery for the hospital patients there was a smaller one for the staff at the back of the church.

There was a large cloister and a smaller one. Residences for the master, the brethren, the sisters, and the officials. More than this we do not know about the hospital buildings in the earliest times. There is a picture (plate 13), to which further reference will be made, of a joust in 1442 with the hospital in the background; there are engravings of the burnings at Smithfield in Foxe's "Book of Martyrs," and there are the maps of London in the time of Queen Elizabeth (plate 4), but none of these gives any detail. The earliest

map is a plan of 1617, which is here reproduced (plate 5). It shows the hospital still with cloisters, *dortoir*, and gardens, features which remain in the engraving of 1720 (plate 6).

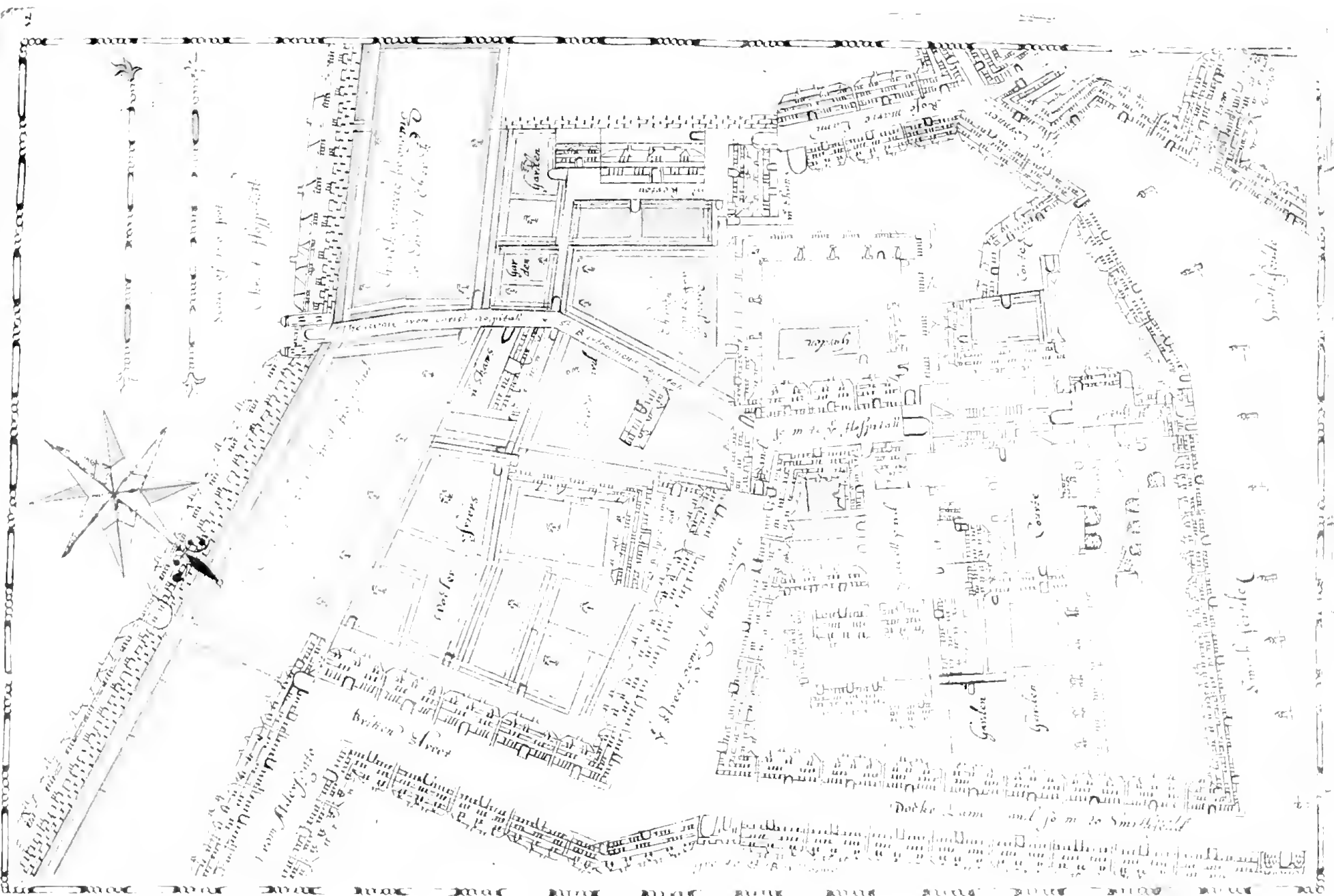
NOTABLE INHABITANTS WITHIN THE HOSPITAL PRECINCTS.

The occupants of the houses within the hospital grounds are known because they paid rent, and for many years Smithfield and its immediate neighbourhood was a fashionable part of the City. The house on the right of the Smithfield gate, facing the chapel, was occupied, in the fifteenth century, by Lady Joan Astley, nurse of King Henry VI (1421-1471). Robert Danvers, Recorder of London, also lived in the hospital about the same time, whilst another house, called Bragwayne Hall, was let to William Cleve in 1467, who was "Clerk of the Works to our Lord the King."

In the next century Dr. Caius, founder of Caius College Cambridge, lived in the hospital though he was not of it. He lectured for twenty years in the Barber Surgeons' Hall in Monkwell Street, and might have been seen every Tuesday afternoon walking out of the Little Britain gate across the Close and through Jewin Street to the Hall.

Dr. Roderigo Lopez, the first physician to the hospital, also lived in one of the houses. He was drawn, hanged, and quartered at Tyburn for compassing the death of Queen Elizabeth. He asked 50,000 crowns of Spain, and received a jewel in part payment.

Another notable resident was Dr. Timothy Bright. He,



PLAN OF THE HOSPITAL IN 161-
from the 'Repertory' Book

too, was physician to the hospital, but he is better known as the Father of modern shorthand, and the writer of an abridgement of Foxe's "Book of Martyrs." He resigned his office of physician in 1591, took orders, and was instituted to the Rectory of Methley, near Leeds. The exact position of his house is known because it was ordered in 1588 that "a brick wall should be built at the end of Dr. Bright's garden abutting on Christ's Hospital."

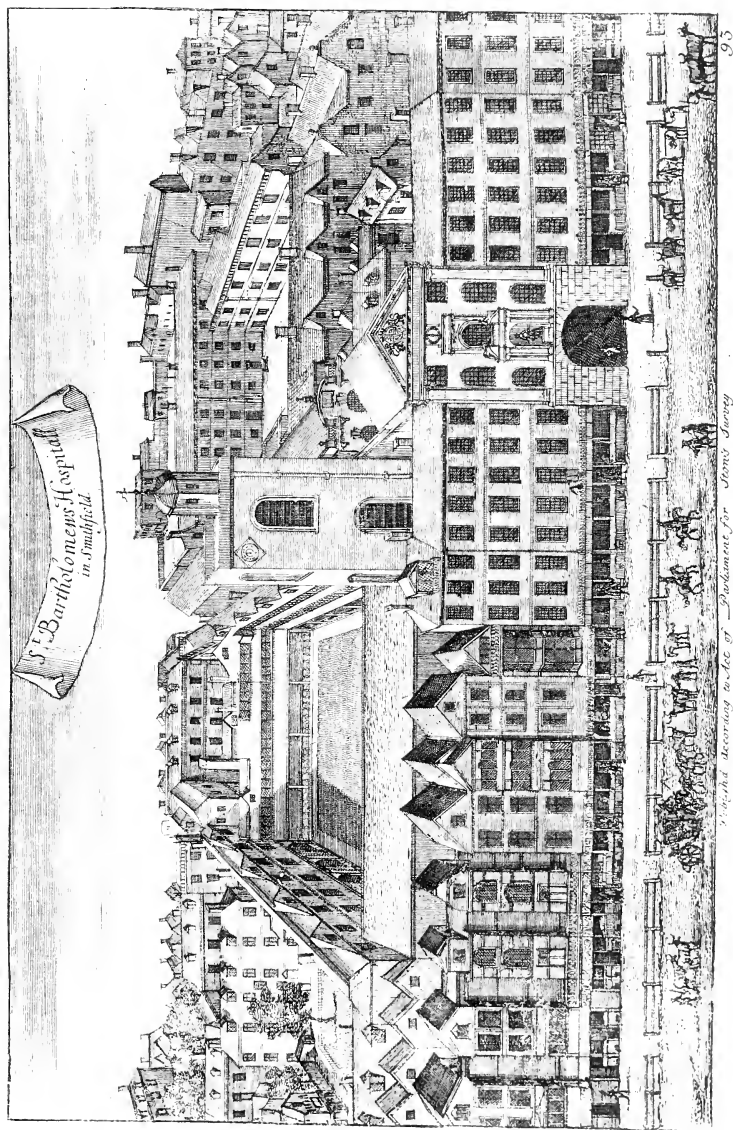
Bright was succeeded by Dr. Thomas Doyley, who had led an adventurous life as a secret agent for the Government in the Low Countries. He was a skilful linguist, and contributed largely to the Spanish Dictionary which Percivall published in 1591. Whilst he was living in the hospital he once held the Governor of Dunkirk as a prisoner, although the surroundings were not all that could be desired for so noble a captive. He complains that he was much annoyed by "divers of the poor inhabitants in the Close who hang their beddings and beastly rags before his door, and by some of the sisters who have emptied foul vessels under his chamber window, as well as by people from Smithfield who wash their bucks in the Close." Doyley perhaps looked upon these inconveniences as minor evils, for he had once been a prisoner of the Governor and had been stripped naked and kept in confinement for many days whilst it was decided what should be done with him.

Dr. William Harvey never lived in the hospital, but whilst he was physician "a great house and garden within the Close" was occupied by Sir Thomas Bodley, founder of the

Bodleian Library at Oxford. He paid a rent of £5 6s. 8d. a year and in this house Lady Bodley died. She was buried in the church of St. Bartholomew-the-Less where her monument may still be seen. Sir Thomas Bodley also died in the house eighteen months afterwards and is buried in the chapel of Merton College, Oxford.

Colonel Thomas Pride—known to history in connection with “Pride’s Purge”—was living in the hospital during the Commonwealth.

The better class of residents gradually disappeared, though the shops and poorer inhabitants remained until the present hospital was built. Complaints were made as late as January 1746 “that the box-carriers attending the surgeons do keep shops for the sale of ale, beer, tobacco, and other things, and that the sisters compel the patients to buy their necessities of these box-carriers. It was decided that none of the sisters or nurses of the hospital do direct, or by any way oblige their patients to buy their necessities at any particular shop.” The evil continued but in another form, for further complaint was made in 1754 “of the resort of idle, loose, and disorderly persons, beggars and others, crying and selling all manner of commodities very improper for the patients in and about the staircases and wards of the second and third pile of buildings to the great discredit of the good government of the house.” No further trouble seems to have arisen after this date, so that effective steps must have been taken to stop it. How difficult this must have been is known to many of us who had experience of hospitals during



THE HOSPITAL IN 1720

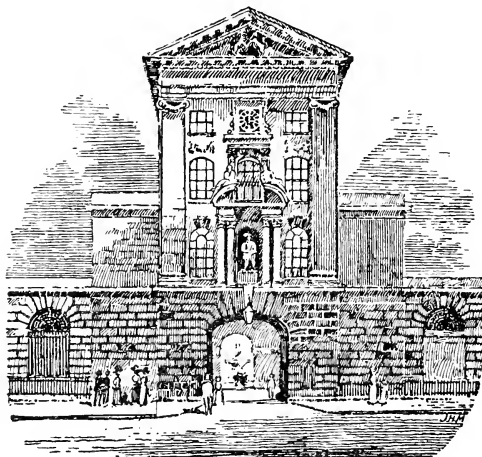
the War when, even with a sentry at the gate, the wards became infested with a similar class of person. They gained access to the wards on a variety of pretexts as soon as it became known that the soldiers had money to spend. It must have been doubly difficult to exclude them at St. Bartholomew's, where there was a public right of way from Smithfield to Little Britain.

THE REBUILDING OF THE HOSPITAL.

The hospital was completely rebuilt in the eighteenth century. The engraving of 1720 (plate 6) shows the hospital much in the same condition as the plan of 1617 (plate 5), with the addition of the gateway, which is called King Henry VIII's Gateway from the statue of that king which is placed in it. The gateway in the engraving leads into a narrow lane; the hospital is surrounded by dwelling houses and consists of quadrangles, the buildings being three storeys high, and one of them has a gallery such as is often seen in old inn yards.

The gateway (page 20) was the first of the great structural changes made in the eighteenth century. It was built in 1702 when the hospital had a small surplus of income over expenditure. Sir Norman Moore says: "It is a good piece of architecture. In a niche over the centre of the archway is a statue of King Henry VIII, with two pillars on each side of it, and an interrupted entablature above bearing two partly recumbent figures of patients. A window is placed between

these, and above the ornate canopy of the window is a clock. Three windows on each side flank the statue, central window, and clock, while the fine pediment, supported by two pilasters and containing the Royal arms completes the design." The rooms in the gateway used to be occupied by the house



THE HENRY VIII GATEWAY

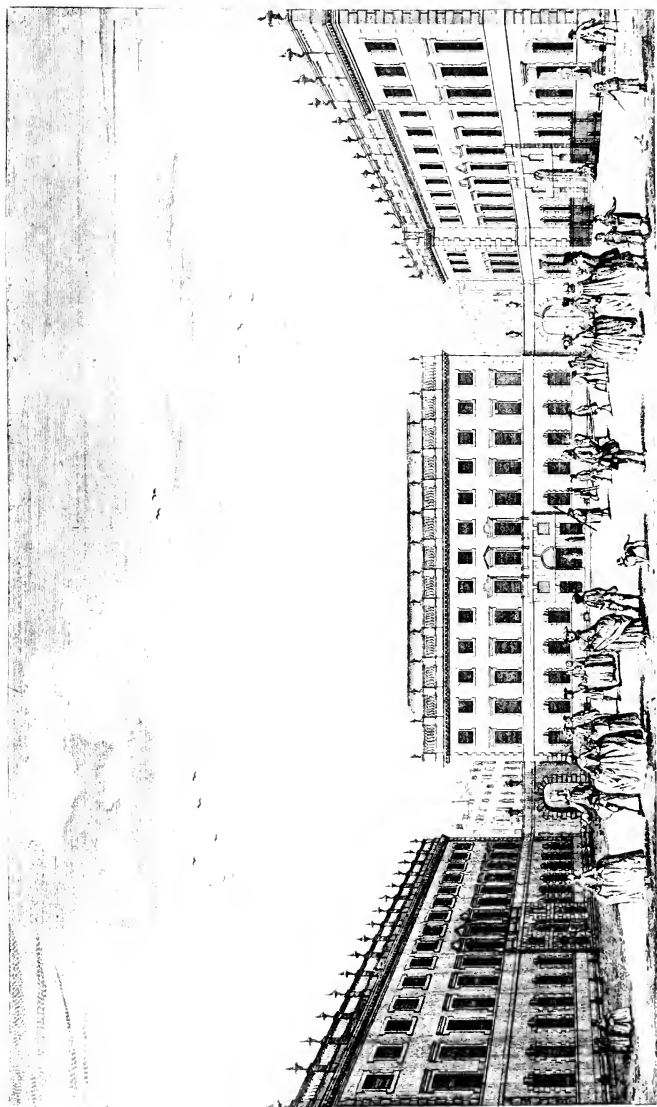
surgeons, but for many years past they have been inhabited by the beadles and their families.

The cost of the new hospital built between the years 1730 and 1759 was defrayed by voluntary contributions from subscribers whose names, with the sums they gave, are inscribed in letters of gold on the walls of the Great Hall. The build-



JACOBUS GIBBS
ARCHITECTUS AMSTERS.
1759.

JAMES GIBBS, ARCHITECT
after Hagarth



An Engraving of the Exterior of St. Bartholomew's Hospital, and the Chapel of the Virgin Mary, as they appeared in 1752. The Hospital was designed by Sir Christopher Wren, and the Chapel by Sir James Gibbs. The engraving was published by J. Smith, in 1752.

ings were designed by James Gibbs (plate 7) whose reputation as an architect was already made. He had designed the churches of St. Mary-le-Strand, St. Martin's-in-the-Fields, St. Peter's, Vere Street, then known as Marybone Chapel (where he is buried), the Senate House and the Fellows Buildings of King's College at Cambridge; a few years later he built the Radcliffe Camera at Oxford. The memory of Gibbs is remembered gratefully at St. Bartholomew's because he gave all his drawings, time, and attendance at the hospital as a free gift out of charity to the poor. The design of the hospital is remarkable for the time at which it was made, for Gibbs paid especial attention to the securing of abundant light and air. The wide staircases with their oak balustrades, now black with age, and the simple structure of the wards, ventilated by natural means, are worthy of notice. The four blocks of building, making the quadrangle, are of brick, which is now faced with Bath stone, and each block was originally connected with its neighbour by an arch (plate 8). The original design consisted of three storeys with a high-pitched roof (plate 8), as is still seen in the block containing the Great Hall. The exigencies of space led to the addition of another floor, lighted by dormer windows, which have spoilt the general effect as seen from the Square, whilst the wards thus built are not comparable with those in the original design. An additional block, known as the Abernethy block, was built in 1791, and has the main operating theatre attached to it as an annexe. This theatre was built at the instigation of John Abernethy in

1791, and was remodelled in 1913 in memory of Etherington-Smith, an assistant surgeon of great promise, who had been captain of the University Boat Club at Cambridge. The wards in the Abernethy block are not so well proportioned as those in the original building, but it is remarkable for the thoroughly well-equipped and well-managed "Casualty" ward in the basement which is worthy of notice as one of the few underground hospital wards in Europe devoted to the nursing of acute surgical cases.

Three of the blocks built round the central quadrangle are devoted to patients, and the fourth to administrative purposes. The three blocks contain twenty-eight wards arranged in pairs on each floor, running right and left of the staircase. The majority of the wards are divided longitudinally into two halves by a brick wall, access from one part of the ward to the other being only possible at either end (plate 29). Open fireplaces heat each ward and have recently been supplemented by radiators. A sister's room, where she both lives and sleeps, opens out of the "front ward" by a half-glass door, and a small ward kitchen is attached to each "back" ward. The bathrooms and lavatories, built out at the other end of the ward to secure cross ventilation, are modern additions.

The administrative block contains the steward's office on the right as the hospital is entered, and the clerk's or secretary's office on the left, with the treasurer's house adjoining and under the same roof. The greater part of the first floor is devoted to a "Great Hall" (plate 12), used for meetings of governors, hospital feasts, amateur theatricals, concerts, and



THE GRAND STAIRCASE



THE POOL OF BETHESDA
after Hogarth

various other purposes. It is approached by a grand staircase (plate 9), the walls of which are decorated by two large frescoes painted by Hogarth (1697-1764) in memory of his birth near the hospital. The subjects are the Pool of Bethesda and the Good Samaritan. Sir Norman Moore says: "In the former (plate 10) the figure of our Saviour has a dignity not often met with in Hogarth's work, and not well represented in the engravings of this picture. The arches round the pool, the distant landscape and the flying angel seem reminiscences of Italian art, but the grouping of the figures and the figures themselves are highly original. The pictures are appropriate to their place and are fine examples of the art of Hogarth.

"In the foreground of the picture of the Pool of Bethesda is the man who had long lain at the pool, and whose infirmity had prevented his reaching the rising waters in time. He rests on his bed, and is unwinding the bandage from a chronic ulcer of the leg, which Hogarth has imagined as the cause of the patient's inability to get down into the pool.

"Behind the poor man with the ulcer is a mother holding in her arms an infant with rickets. The prominent forehead, the curved spine, the enlarged joints which Dr. Francis Glisson, the first describer of the disease, pointed out, are all faithfully depicted by Hogarth. Perhaps his friend Freke had demonstrated them to him, for the surgeon has a chapter on rickets. On the other side of the painting are a woman with inflammation of the breast, and a man whose gouty hand seems to have received a knock from the blind man

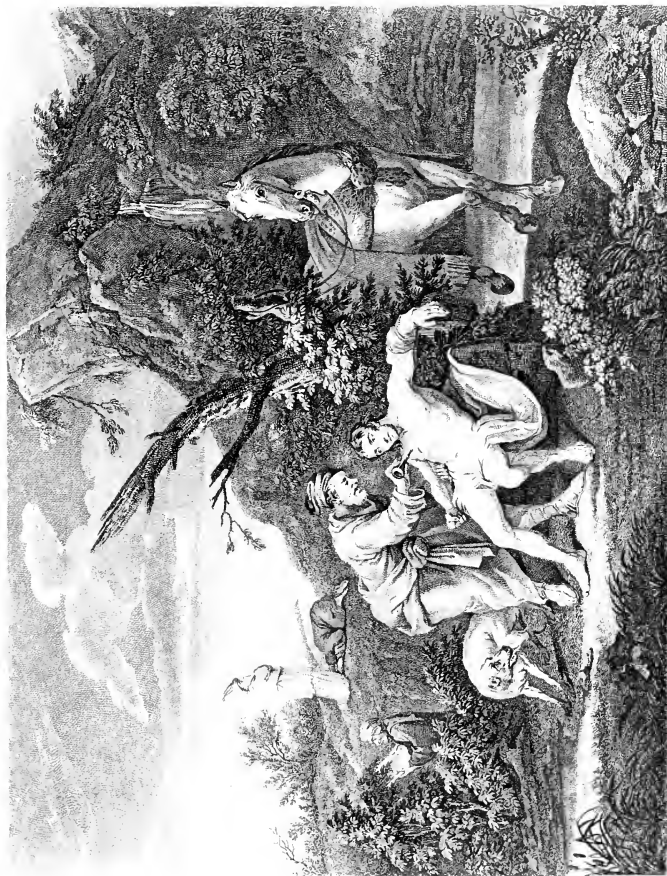
whose staff is near it. To the extreme left are a girl unhealthily fat and an emaciated crone. The arms of both are bare, and seem intended to illustrate hypertrophy and atrophy, the process of abnormal growth and abnormal waste, of which many examples are every day to be seen in the practice of the hospital. All the sufferers are drawn from the patients of Hogarth's time. Their illnesses are not exaggerated, nor are the terrible features of disease heightened beyond nature. The painter has given an intelligent view of what the hospital dealt with in both sexes and at several periods of life.

"In the painting of the Good Samaritan (plate 11), Hogarth has drawn a dog in the foreground licking a wound in its leg, apparently received in defending the injured man from the thieves. The Samaritan, in accordance with the gospel narrative, is pouring oil and wine into the wound, a method which continued in general use till the sixteenth century, when an accident led Ambroise Paré to give it up.

"The three sketches below these pictures represent Rahere asleep and dreaming, his reception of gifts and beginning of building the hospital, and a patient carried on a stretcher and received in the cloister by two of the brethren of St. Bartholomew's. Hogarth could, of course, remember the old cloisters, and this is perhaps a sketch from his memory.

"The decorations which were done by Hogarth's pupils consist of baskets of flowers, medallions of Hippocrates and Galen, and frames in the Georgian style."

The Great Hall itself contains numerous pictures of



THE GOOD SAMARITAN
after Hogarth



THE GREAT HALL

former officials and members of the medical and surgical staff, the most noteworthy being Percivall Pott painted by Sir Joshua Reynolds, and Sir James Paget by Sir John Millais. There is also the painted Memorial Window (plate 16), which was made early in the seventeenth century and is described on page 32.



FROM COCK'S CARTULARY

THE PATIENTS



THE hospital was founded by Rahere as has already been said for the feeble, the poor and the sick, for the delivery of women and for the support of their children should they die in child-bed until they were able to support themselves. A few facts remain on record about the early patients and of the manner in which they were admitted and treated. One of the first was Adwyne in the time of Henry II (1133-1189). Adwyne lived at Dunwich, in Suffolk, which has long since been swallowed up by the sea, and he had been apprenticed to a carpenter. "He dwelt near the sea, and was so crippled that he might not use the free office of hand nor of foot, his legs were cleaving to the hinder part of his thighs that he might not go, and his hands turned backwards nothing with them might he do nor work. His fingers, too, were so rigorously contracted in the sinews that he could not put meat in his mouth. In this grievous sickness he passed his youth, and when he attained to man's age and had not the power of his limbs, yet since the fame of tokens and miracles of the blessed Apostle [Bartholomew] came to him by relation of other men, he began to lift up his sorrowful soul into a better

hope. And though health were in that time delayed, it was promised to come. Therefore, for that he was far from that Church he gave shipmen for their hire, and by ship he was brought to the Church and put in the hospital of poor men. And there awhile of the alms of the said Church was sustained. And he began in the meanwhile by the virtue of the Apostle to take breath unto him and the desired health. First with his hands, though they were crooked, he did make small works as distaffs and weights and other women's instruments, and furthermore by succession when other members used their natural might he followed in greater works, hewers of wood with axe and squarers of timber with chipping axe [adze] and not long after, the craft of carpentry in the same Church and in the city he exercised as it had been taught him from his childhood, blessing God whose eyes be on them that dread Him, and upon them that hope on His mercy." It appears clear that this patient who had suffered from rheumatism was treated by a prolonged course of graduated exercises.

Another case was that of "a certain maidservant of a Citizen of London who was brought to the foresaid hospital, the which might not stretch forth any foot that she had, either because for long sickness y-vexed she had kept her bed long, or because the sinews of her hams were contracted. The blessed Apostle on a night appeared to her in her sleep and commanded her to stretch out her feet and she, at the commandment of the Apostle, lightly her feet did outstretch, and in the morning rising up she had health of the one, and at evensong time she had free use of both. They marvelled that

were present, and asked her what betided her that night. And she told what she saw, and confessed the author of her health, praising the Apostle of Christ, and giving thankings to God."

We learn from these and other cases that the patient has always been the first consideration in the hospital. For him the hospital was founded, for him house, food, bed, and fire were provided. Then, as now, he came from far distances as well as from the immediate neighbourhood. Walking most of them, sometimes on a mule, rarely on horseback, occasionally by barge, which would bring him up the Thames, along the Fleet, and land him at the bottom of Hosier Lane, a stone's throw from the hospital. Arrived at his journey's end, he and the little company of friends who accompanied him would go to the great Priory Church to give thanks for his escape from the perils of the way, and would there ask help of the canons. The change of air and scene and food during the many days' journey often had produced so great an improvement that two or three nights' rest in the convent would complete the cure, and the patient would start home again announcing the miracle in every alehouse where he rested. The very sick died on the way, the moderately sick were cured by natural processes, and also suggestion; there remained a third group, and these the canons, with knowledge born of long experience, sent over to the hospital, which was then, as now, opposite their doors. Thus recommended, the patient would ring at the hospital gate, would be interviewed by the porter, admitted, and questioned by the master, or by



THE JOUST IN SMITHFIELD

one of the eight brethren. Being found suitable, he would be admitted into the hospital, and a sister would bring him water to wash his face, his hands, and his feet, but in the early days at least he found only rough accommodation and poor food, though it was no worse than he was accustomed to at home. The brethren themselves slept on a rug upon the floor with a pillow as a concession to human weakness and one or more rugs to cover them; the sisters fared no better, so it is probable that the patients were accommodated in like manner. Later, the beds were raised from the ground; later still they had curtains and a man was provided at an annual charge to keep them free from bugs. It was not until 1815 that iron bedsteads were provided.

There is evidence to show that from quite early days paying patients were occasionally admitted, although they were always in the minority. They took the habit when they were sick, and maintained themselves without charge to the hospital. Dying, they were buried in the hospital cemetery; recovered, they went back to secular life.

Jousts, the horse-market, and Bartholomew Fair (plate 15) with its attendant crowds must always have provided injuries for hospital treatment. The general turbulence of all classes in the Middle Ages, when people drank freely and went armed, was sufficient to maintain from twelve to seventeen surgeons in the City of London, in addition to the barbers practising surgery who acted as the general practitioners. Of the accidents at the tournaments in Smithfield several are recorded. When the Earl of Mar challenged the Earl of

Nottingham in 1376 he was overthrown—man and horse—after the first few courses. Two of his ribs were broken, but after three days' rest he travelled towards Scotland, and died on the way. A picture still exists, and is here reproduced (plate 13), of the great tournament, held just in front of the hospital in 1442, when the Bastard of Burgoyne challenged the Lord Scales, brother-in-law of King Edward IV, to fight both on foot and horseback. The King, the Queen, and the Court were present "and the first day they ran together with spears and departed with equal honour. The next day they tourneyed on horseback, when the Lord Scales' horse, having on his chafron a long spear-pike of steel, thrust his pike into the nostrils of the Bastard's horse. So that for very pain he mounted so high that he fell on the one side with his master, and the Lord Scales rode about him with his sword drawn till the King commanded the Marshal to help up the Bastard, who said, jestingly, 'I cannot hold me by the clouds, for though my horse fail me *I* will not fail me an encounter, companion.' But the King would not suffer them to do any more that day.

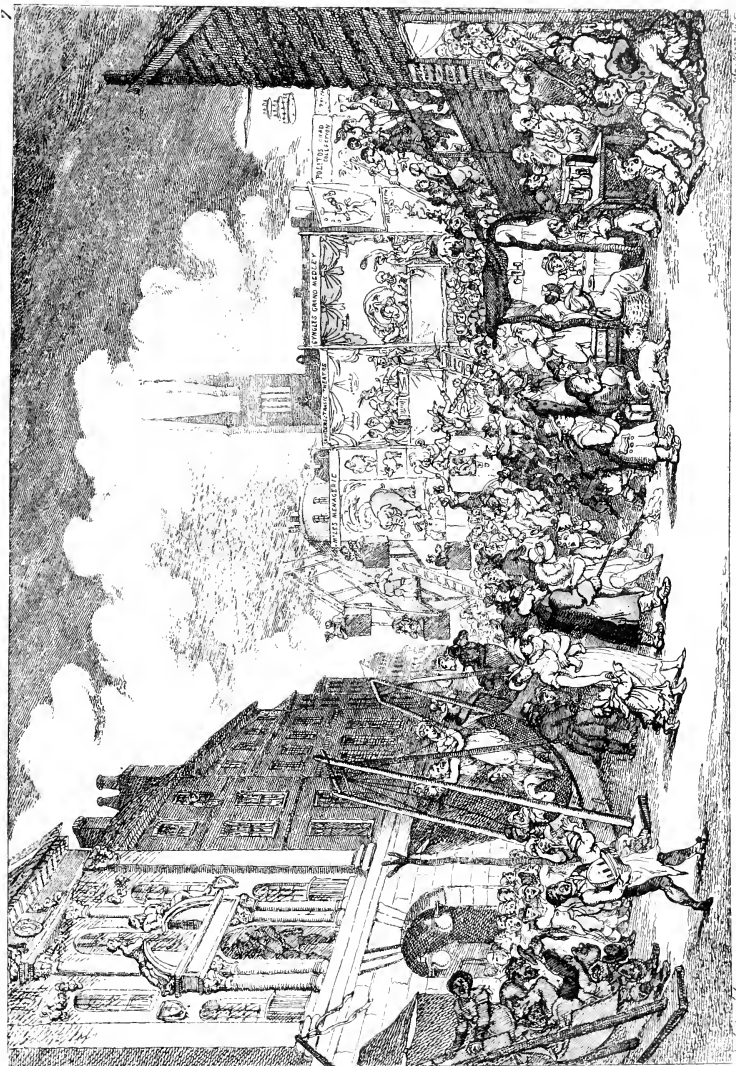
"The next morning they came into the lists with two pole-axes and fought valiantly, but at the last the point of the pole-axe of the Lord Scales entered into the side of the Bastard's helm and by force made him place him on his knees, but the King cast down his warder and the Marshal severed them."

The great services rendered by the hospital to the sick poor of London were fully recognized when Henry VIII took



A BIRD'S-EYE VIEW OF SMITHFIELD MARKET.
FROM THE HOUSE OF COMMONS.

SMITHFIELD MARKET IN 1811
after Rocclandon



BARTHOLOMEW FAIR IN 1807
after Rowlandson

the revenues into his own hands, and it was feared that the hospital might be abolished. The citizens at once petitioned for its continuance on the ground that "there were miserable people lying in the streets offending every clean person passing by the way with their filthy and nasty savours." This view of the state of affairs was not denied by the King, who states in return that he refounds the hospital in consideration of the miserable state of "the poor, aged, sick, low, and impotent people, as well men as women, lying and going about begging in the common streets of the said City of London to the great pain and sorrow of the same poor, aged, sick, and impotent people being infected with divers great and horrible sicknesses and diseases, his Highness of his bountiful goodness and charitable mind moved with great pity for and towards the relief, aid, succour, and help of the said poor, aged, sick, low, and impotent people, and for the avoiding of the great danger and infection which daily doth and may ensue to his loving subjects by reason of the great sickness and horrible diseases of the same sick and low people . . . is pleased and contented to give and grant to the Mayor and Cominalty and Citizens of London and their successors for ever the late hospital of St. Bartholomew."

A certain proportion of the sick and impotent persons here named, who were probably incorrigible rogues and vagabonds, were unwilling to accept the help thus offered to them, and the City at once proceeded to clear the streets by appointing eight beadles to the hospital whose duties will be considered presently (page 68),

The event is commemorated by a painted window in the Great Hall (plate 16) showing King Henry VIII delivering a charter to Sir Richard Gresham, Lord Mayor of London in 1547. Prince Edward, afterwards King Edward VI, is seen on the left of the King. A wired frame was ordered to be placed over the window in 1710 and to this foresight we owe its preservation, for it escaped uninjured when the air raids in 1917 destroyed all the other windows in the Hall. The window should be compared with the painting, said to be by Guillim Streetis, which hangs in Bridewell and represents King Edward VI handing a charter to George Barne, who was Lord Mayor in 1553.

The patients admitted to the hospital after the refoundation seem to have been more in need of surgical than of medical treatment. Three surgeons with salaries were appointed in 1549, but it is not until 1568 that there is any mention of a physician. Thomas Gale, the great Elizabethan surgeon, writing in 1562, says: " I did see in the two hospitals of London called St. Thomas's Hospital and St. Bartholomew's Hospital to the number of three hundred and odd poor people that were diseased of sore legs, sore arms and feet and hands with other parts of the body so sore infected that a hundred and twenty of them could never be recovered without loss of a leg or an arm, a foot or a hand, fingers or toes, or else their limbs crooked so that they were either maimed or else undone for ever."

During seven years, between 1645 and 1656, which were not consecutive, the number of patients in the hospital



KING HENRY VIII GRANTING THE CHARTER
A Window in the Great Hall

averaged 684 annually, and a mortality of ten per cent. was pretty uniformly maintained.

The charity which had been free to all at its foundation gradually became obstructed by a system of governors' letters and fees. A patient had first to obtain a governor's letter of admission, which was necessary even in urgent cases, or he had to deposit the sum of nineteen shillings and sixpence for burial fees, which, of course, was returned if he were fortunate enough to recover. If he died the beadle received one shilling for giving notice of his death to the friends, the porter got a shilling for a certificate to the parish where he was buried, and the bearers had to be paid two shillings for carrying the body as far as the gate of the hospital. A shilling was due to the matron for the use of a black cloth which no doubt served as a pall, and the steward had to be paid one shilling for certifying the death. Inability to pay the caution money for burial led to delay in admission, and at last, so flagrant a case occurred that it drew attention to the entire system and was thus productive of good. Dr. William Marsden, who had been apprenticed to John Abernethy, the surgeon, then living in Bedford Row, was going home one night in 1828 when he found a girl of eighteen on the steps of St. Andrew's Church Holborn, almost dead of disease and starvation. For want of money or, as an alternative, a governor's letter, she had been unable to gain admission to St. Bartholomew's Hospital. He befriended her, the case aroused his sympathies, and being a man of action, he organized a crusade against the system of governors' letters.

In the following year he opened a small dispensary in Greville Street, Hatton Garden, to which the sick poor were admitted without payment and without formality. From this small beginning grew the Royal Free Hospital.

Even after admission to the hospital fees were still required of the patients. The sister in the Cutting ward was allowed to take half a crown from each patient, whilst the helper or nurse had one shilling. The sisters in the other wards took one shilling from each of their patients; the beadle had sixpence for carrying the patient to the ward and his helper also had sixpence. The whole iniquitous system was at last swept away and the salaries of the officials were revised to compensate them for the loss. The memory of the time, however, still lingers in the notices which are posted in many parts of the hospital that no servant of the hospital is allowed to receive any present or gratuity from a patient, whilst the *vestigium* of the governors' letters is occasionally seen as an official printed letter from the Mansion House recommending the bearer for treatment.

THE OUT-PATIENTS

It was considered in 1678 that the number of out-patients attending the hospital had become burdensome and they were limited to eight a week. They became so insistent, however, that in 1696 fifty a week were allowed to attend;

in 1744 they had increased to 250; and in 1878 they had reached the astounding number of 250,000 in a year, and this was maintained for many years. It was at length reduced to more manageable proportions by a system of inquiry into



THE CRIPPLED SOLDIER

the circumstances of those who desired to avail themselves of the charity. The arrangements for out-patients visiting the hospital are rather difficult to understand without some explanation of the system upon which they are seen and treated. There are, in the first place, two classes—casualty patients suffering from minor ailments, and out-patients,

properly so called, who require more prolonged treatment but are not sufficiently ill to be admitted as in-patients. The casualty patients, after they have been seen by one of the assistant physicians or assistant surgeons, are treated by the house physician or house surgeon, the latter having students—called dressers—to help him. The out-patients proper are seen by the assistant physicians or the assistant surgeons in surroundings which enable them to be more thoroughly examined. Clinical clerks, in the case of the medical patients, and dressers on the surgical side, attend these examinations and are instructed in clinical methods.

THE SISTERS

The four sisters formed an integral part of the original foundation of the hospital, and from them in direct descent comes our present nursing staff. The sisters of the old foundation were professed nuns, wearing tunics and over-tunics of grey which it is expressly stated were not to reach lower than their ankles. They lived under the rule of St. Augustine, who founded the order first for women and only later for men. They had a common dormitory and a refectory where they received daily four loaves of white bread of the same quality as that supplied to the brethren, three loaves of second quality bread, half a flagon of ale, and the better of two dishes of cooked food from the kitchen of the brethren.

They were chosen by the prior of the convent of St. Bartholomew upon the recommendation of the master and brethren of the hospital. They swore fidelity before the prior and master to the prior and convent, and obedience to the master of the hospital. One of their number was deputed to take charge of and to issue from the common stock the garments and other necessary articles. Their work was lifelong, and in some cases at least they held good social positions, and were possessed of sufficient property to enable them to make bequests to the hospital which was their home.

In the course of ages some of the sisters must have become specially versed in midwifery, for many women were delivered in the hospital; others must have created the tradition of skilled and kindly nursing which still exists as the hall-mark of the best type of St. Bartholomew's nurse. The patient is always to be the first consideration, while gentleness, courtesy, and numberless little tricks and details have been learnt and carried on from generation to generation by observation, and not by precept or formal instruction. The numbers remained unaltered for four hundred years, and although the duties were nominally unchanged, it is manifest that four persons could not have nursed from sixty to a hundred patients, even when many could help themselves and all were made to do more than is now required. There must have been subordinates but of these we hear nothing.

There was no break in the tradition, but there was a great reorganization when the religious foundation ceased and the hospital became secularized. A few patients remained in the

hospital during the change, and the sisters must have been there to attend upon them. In 1544 five sisters were appointed, and in 1551 the number was increased to twelve. One of the twelve was chosen to act as matron, and to her was attached "a fool," perhaps a *famulus* or servant. The appointment of sister carried with it a livery or habit just as in the pre-Reformation days when the sisters were professed nuns. Each received a yearly grant of six yards of cloth at 22s. 6d. The cloth was at first of russet frieze, but in 1555 it was changed to watchet or light blue, and blue has remained the distinctive colour of the sisters' uniform ever since although the exact shade has varied from time to time.

The duties of the matron and sisters are clearly defined in two interesting "charges" which were delivered to them when they first took up their duties. The charge of the matron runs: "Your office is to receive of the Hospitaler of this House all such sick and diseased persons as he, by his warrant signed from the Almoners of this House shall present unto you, and the same persons to bestow in such convenient places within this house as you shall think meet.

"You have also the charge, the governance and order of all the sisters of this House, to see from time to time that every of them, in the wards committed to their charge, do their duty unto the poor as well in making of the beds and keeping their wards as also in washing and purging their unclean cloths and other things. And that the same Sisters every night after the hours of seven of the clock in Winter and nine of the clock in Summer come not out of the woman's

ward except for some great and special cause as the present danger of death or needful succour of some poor person. And yet at such a special time it shall not be lawful for every Sister to go forth to any person or persons, No, though it be her ward but only for such as you shall think be virtuous, godly and discreet. And the same Sister to remain no longer with the same sick person than needful cause doth require.

“ And at such time as the Sisters shall not be occupied about the poor you shall set them to spinning or doing of some other manner of work that may avoid idleness and be profitable to the poor of this House.

“ You shall also as the chief Governess and worthy Matron of this House have special regard to the good ordering and keeping of all the sheets, coverlets, blankets, beds and other implements committed to your charge that now do, or hereafter shall, appertain to the poor.

“ Also you shall suffer no poor person of this House to sit and drink in your house at no time, neither shall you send them drink into their wards that thereby drunkenness might be used and continued among them but, as much as in you shall lie, you shall exhort them to virtue and temperance declaring this House to be appointed for the harbour and succour of the dear member of Christ's body and not of drunkards and unthankful persons.

“ Herewith you are charged, and not with any other thing. But if there shall be anything done by any officer or other person of this House that shall be unprofitable thereunto or that may be the occasion of any disorder or shall engender

slander to the same that you then declare it to some one or two of the Governors of this House and to none other person nor further meddle therein."

The sisters in like manner were enjoined: "Your charge is in all things to declare and show yourselves gentle, diligent and obedient to the Matron of this House who is appointed and authorized to be your chief governess and ruler.

"Ye shall also faithfully and charitably serve and help the poor in all their griefs and diseases as well by keeping them sweet and clean as in giving them their meats and drinks after the most honest and comfortable manner. Also you shall use them good and honest talk such as may comfort and amend them and utterly to avoid all light, wanton and foolish words, gestures and manners using yourselves unto them with all sobriety and discretion. And above all things see that you avoid, abhor and detest scolding and drunkenness as most pestilent and filthy vices.

"Ye shall not haunt or resort to any manner of persons out of this House except ye be licensed by the Matron, neither shall ye suffer any light person to haunt or use unto you, neither any dishonest person, either man or woman, and in so much as in you shall lie, ye shall avoid and shun the conversation and company of all men.

"Ye shall not be out of the woman's ward after the hour of seven of the clock in the night in the Winter, nor after nine of the clock at night in the Summer, except ye shall be appointed and commanded by the Matron so to be for some great and

special cause that shall concern the poor (as the present danger of death or extreme sickness) and yet so being commanded ye shall remain no longer with such diseased person than just cause shall require.

“ And if any just cause of grief shall fortune unto any of you or that ye shall see lewdness in any officer or other person of this House which may sound or grow to the hurt or slander thereof ye shall declare the same to the Matron or unto one or two of the Governors of this House that speedy remedy therein may be had and to no other person neither shall you talk or meddle therein any further. This is your charge and with any other thing you are not charged.”

The nursing tradition which is so marked a feature of the hospital is clearly based upon these sensible injunctions. It appears as if they in turn were a part of the old law. Where else should come the warning to “ avoid the conversation and company of all men,” and was not the “ woman’s ward ” clearly the old convent dormitory under a new name? The common dormitory continued until 1787, when the sisters were assigned the small room partitioned off from their ward which they still use as a bed sitting-room. The change was probably for the better, as there are several orders to clear the sisters’ ward of bugs, a duty undertaken by the hospital bug-catcher. The matron always had a separate lodging where, in addition to the company of the “ fool,” she had the privilege of selling strong beer and small beer, which was kept in a cellar under her house. This perquisite was not abolished

until the eighteenth century was well advanced and the excise laws came into being.

The sisters were paid a pound a year for their services, and there was an allowance of twelve pounds a year for their diet. The salary of the matron was 26s. 8*d.* a month. As has been shown, however, both matron and sisters received fees in addition to their wage.

The number of sisters remained stationary at twelve for many years. It was reduced to six immediately after the Great Fire of London in 1666 because the wards were nearly empty owing to depopulation of the City. Twenty years later there were sixteen sisters, and in 1802 the number had risen to thirty-one, and there were thirty-three night nurses.

A new class of women helpers who may be looked upon as the forerunners of the present staff nurses was in existence as early as 1647, and they sometimes claimed the reversion to the place of sister. In 1755 and perhaps for many years previously night nurses known as "the watchers" were employed. They lived outside the hospital and were summoned when their services were required. In 1818 there was a regular nursing staff, for the physicians and surgeons in that year represented to the governors that one sister and two nurses were insufficient to attend to the wants of the patients in a double ward. In 1821 the nurses were ordered to wear a brown uniform (plate 28), and in 1868 they were relieved of the menial duties of scrubbing the wards and passages, which they had done hitherto under the supervision of the sisters. The female staff at this time consisted of less than 120 per-

sons; in 1921 no less than 323 were employed in nursing duties alone.

An institution was opened in 1877 for the training of nurses employed in the hospital. A staff of teachers was appointed, examinations were held, prizes and certificates were awarded. The institution prospered under the guidance of a series of far-seeing and highly-gifted matrons until hospital nursing became a skilled profession, and hospital nurses set the standard for nursing throughout the world. The number of nurses soon outgrew the accommodation which could be provided for them, and they were housed in a most unsatisfactory manner. A new nurses' home is now being built in which they will obtain the degree of comfort they have a right to demand.

All nurses now enter the hospital as probationers. They wear a light grey dress. In the second year, after passing an examination, they become staff probationers. They then wear a striped dress with a white belt. A certificate of proficiency in nursing is gained by passing an examination in the fourth year, and thus becoming "staff nurses." They then discard the white belt, and put on a blue one, usually a gift from their friends amongst the staff probationers. A staff nurse may be promoted to the rank of sister and she then wears the traditional blue uniform. The matron alone is dressed in black. All wear cuffs and caps, and the dresses are of a washable material. They have also a bonnet and cloak for an outdoor uniform, though its use is not compulsory.

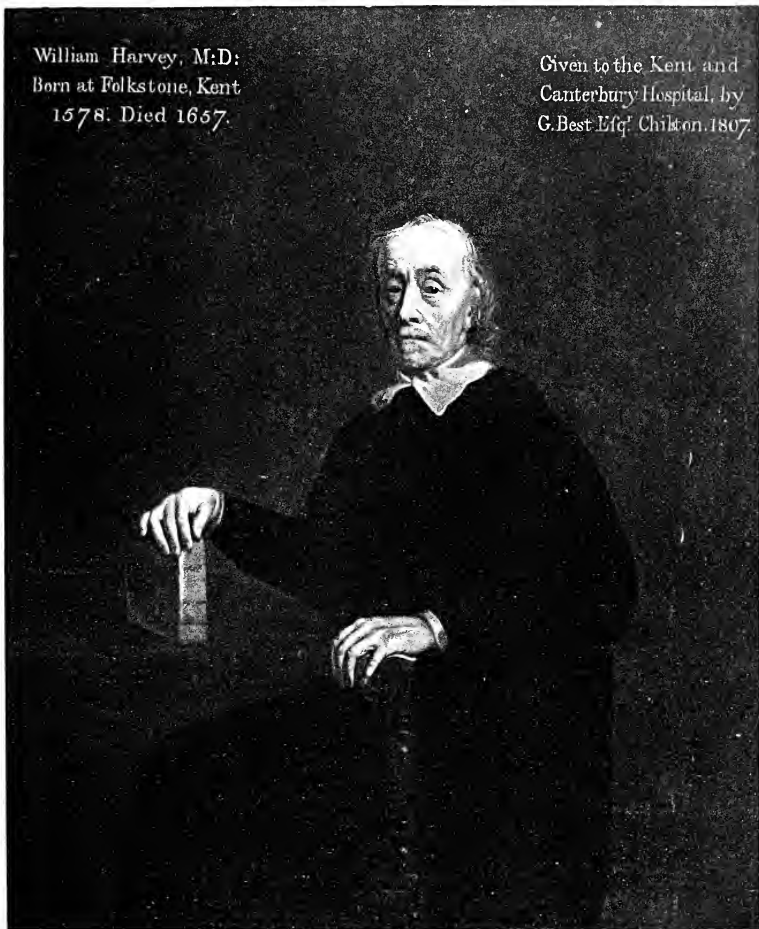
THE MEDICAL AND SURGICAL STAFF

The hospital has nearly always been fortunate in its medical and surgical staff. Many have been great teachers like Percivall Pott, John Abernethy, and David Pitcairn; some have been great collectors of books, like Charles Bernard; others have been orators, like Sir William Lawrence, Sir James Paget, and Sir William Savory. With a single exception—that of Dr. William Harvey (plate 17)—no name stands out conspicuously as a leader of thought in the medical world, but a long succession of physicians and surgeons with great organizing power and general ability has raised the hospital to the position it now occupies in the esteem of the world. The wealth of clinical material in London has led to the formation of a large medical school in connection with the hospital, and has thus enabled the teachers by their pupils to spread their views so widely as to influence contemporary thought and practice.

From very small beginnings the hospital in pre-Reformation times came to maintain fifty to sixty beds, whilst at the second foundation in 1547 provision was made nominally for one hundred patients. This number was only reached gradually for at one time there were but three in-patients and a little later there were ten; in the year 1588 eighty beds were occupied, and the full equipment at the present time is for 748 patients.

William Harvey, M.D:
Born at Folkstone, Kent
1578. Died 1657.

Given to the Kent and
Canterbury Hospital, by
G. Best Esq. Chilton. 1807.



DR. WILLIAM HARVEY

Nothing is known of the system on which patients were treated during the first four hundred years of the existence of the hospital. John Mirfeld, a member of the convent, wrote the "Breviarium Bartholomei" in 1387. It deals with medicine, and gives details of cases he had himself seen, but it contains no evidence that he was actually attached to the hospital, though much of his information was derived from the observations he had made there. Sir Norman Moore shows that he treated chronic rheumatism by rubbing the part with olive oil. "This was to be put into a clean vessel while the pharmacist made the sign of the cross and said two prayers over it, and when the vessel was put on the fire the psalm *Quare fremuerunt gentes* was to be said as far as the verse *Postula a me et dabo tibi gentes hereditatem tuam*. The Gloria and two prayers were then recited, and the whole repeated seven times. The mixture of prayers with pharmacy seems odd to us, but let it be remembered that Mirfeld wrote in a religious house, that clocks were scarce and watches unknown, and that in that age and place there was nothing inappropriate in measuring time by the minutes required for the repetition of so many verses of scripture or so many prayers. The time occupied I have found to be a quarter of an hour."

When Mirfeld treats of injuries he regrets that medicine and surgery have become separate lines of practice. The well-informed, he says, are aware that he cannot be a good physician who neglects every part of surgery, and on the other hand a surgeon is good for nothing who is without

knowledge of medicine. Mirfeld times with precision the recovery of each broken bone. A rib will take twenty days. A humerus or a femur forty days. He had noticed that union is slower in the aged. Mirfeld does not state the name of his master, but records a case which he had seen him treat. It was that of one of the canons who, from an injury to the right side of his head, became paralysed on the left side of his body. His horse reared just as the canon was mounting, and threw him on to his head with such force that he became altogether unconscious. Mirfeld's master ordered the canon's head to be shaved, rubbed oil of roses and a quart of warm vinegar on to the scalp, powdered it, and bound it up with a cloth soaked in oil and vinegar, and then thoroughly bandaged the head in linen, covering the whole with a lambskin. Twice a day he rubbed his neck and spine with ointment. Next day the patient opened his mouth, but the physician refused to give him food. The patient spoke imperfectly on the third day, and rather better on the fourth day when he swallowed a little warm drink. He took some chicken broth on the sixth day and thenceforward grew gradually stronger. Mirfeld's master advised him to eat the brains of fowls and kids so as to repair the damage to his own. It was only a pretty good recovery, "for," says Mirfeld, "the canon was never again of the same mental ability and good memory as he had been before the accident." Amongst other things he advises physicians not to meditate on fees, and tells the shocking case of one who thought so much of thirteen pounds which were due to him for treating a man for three years that,



THE CHAPEL OF

FOR LEPERS IN

SOUTHWARK,

dedicated to S^t Mary

Founded prior to

M B

This Chapel Was Built
To the Honour of God and for the Use of
the Poor Infirm and Impotent People
Harbourd Within this Hospital

May Mar Bond Esq^r Treasurer

Anno 1636

THE HOSPITAL

KENT STREET,

CALLED LE LOCK,

and S^t Leonard,

the XIVth of Edw. II

LONDON, Published 1st January 1814 by ROBERT WILKINSON, N^o 31, Cornhill

THE SOUTHWARK LOCK

when dying and exhorted to receive the Holy Eucharist, this physician could not turn his mind to sacred things but went on repeating "thirteen pounds in three years!"

From the second foundation to the present time it is easy to obtain a continuous history, because our predecessors, like ourselves, have always been eager to adopt new methods. The second foundation was synchronous with a movement, which lasted throughout the rest of the Tudor period, for the conversion of surgery from a trade into a profession. Vicary, Clowes, and Woodall were leaders of the attempt, and they were in succession surgeons to the hospital. Three surgeons were appointed as early as 1547, but the number of the medical staff was soon made up to four physicians and four surgeons, and at this it remained for many years until, in 1895, the number of physicians was increased to five, and there was a corresponding increase of surgeons. The first assistant physician was appointed in 1834. Assistant surgeons existed from the time of Charles Bernard who was appointed full surgeon in 1686 after "having served many years," he says, "as Assistant Surgeon." From this time onwards the term assistant surgeon is used regularly. The two junior assistant surgeons were appointed "Guides" or surgeons in charge of the "outhouses." These were two institutions dating back to very ancient times when they had probably been used as leper hospitals. They were originally six in number and were situated at Mile End, Hammersmith, Highgate, Kingsland, Knightsbridge, and Kent Street. Nothing is known of their origin or by what means they became

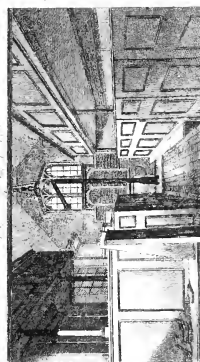
attached to the hospital, unless indeed they were served by the brethren of the original foundation as works of charity, for they retained to the end a certain religious character. After the introduction of syphilis they were devoted to the treatment of venereal disease and were placed at first under the care of "Keepers," who were allowed fourpence a day for the diet of the patients. They gradually disappeared until only two remained, "The Outhouse" in the Kingsland Road which was appropriated to women; the "Lock" in the Old Kent Road for men. Percivall Pott broke his leg in riding down to the Lock (plate 18) one frosty morning in 1756 during his service as "guide." The Kingsland Outhouse (plate 19) was rebuilt in 1726 with accommodation for thirty patients and was provided with a bagnio, a couch-room, and a surgery. The staff then consisted of a surgeon, a chaplain, a sister, a nurse, and a helper. Both outhouses were abolished in 1760 on the ground that they cost the hospital upwards of £700 a year to maintain, the patients being admitted into venereal wards in the hospital which remained until our own time.

The Kingsland Outhouse afterwards became a sort of public room and its chapel remained until 1846, when it was taken down after the governors of the hospital had refused to recognize their liability to pay the stipend of the incumbent, the Rev. Isaac Hills. The Lock seems to have disappeared much earlier.

The method of seeing the in-patients was strictly regulated by tradition. The medical staff met together once a week at a

AND ITS CHAPEL, KINGSLAND, ILL.

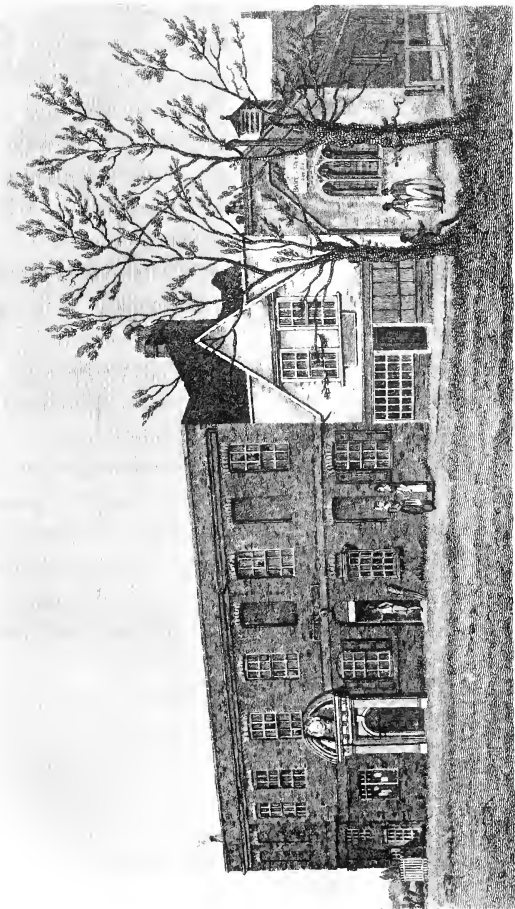
Robert Wilkinson, N. Y. Graduate



THE KINGSLAND "OUTHOUSE"

VIEW OF THE LOCK HOSPITAL

John W. Johnston, N. Y. Graduate



fixed hour and proceeded to walk through all the wards, the physician and surgeon who "took in" on the preceding admission day leading the way. Each medical officer had his ward book carried for him and in this book the names of the patients were inscribed. The physicians, as a rule, did not go to the bedside of the patient but sat in state in a chair. The patients were brought up to them, examined, and the treatment advised was written against their names in the book. This book was taken to the apothecary's shop as soon as the physician had left the ward, and the patients brought back their own medicine. Those who were too ill to do so had their medicines brought to them by the sister.

The surgeons no doubt examined the patients in their beds. They were, however, in complete thrall to the physicians, for it was ordered in 1754 that "the Apothecary do not deliver or prepare any medicine but such as shall be ordered by the Physicians of the Hospital, except that the Surgeons of the Hospital may order mercurial physic and purges for their patients." Even so great a man as Percivall Pott could only prescribe lotions, ointments, plasters, and collyria, with a few pills and electuaries suitable for patients with venereal disease. All his other prescriptions had to be countersigned by one of the physicians.

Specialism was discountenanced, and until lately the physicians and surgeons undertook every form of medical and surgical practice. The requirements of a large school obliged various special branches of knowledge to be taught, and it became the custom to detail the assistant physicians

and assistant surgeons to undertake the teaching in the various special departments. The department to which they were appointed was often a matter of accident, and not of choice or even of fitness. It depended upon the position which happened to be vacant, and whether it was the turn of an assistant physician or an assistant surgeon to fill it. A lecturer on midwifery was appointed as early as 1787, but it was not until 1869 that a physician accoucheur was appointed and was given charge of beds. Ophthalmic surgeons were appointed in 1870; an anaesthetist in 1875; a physician in charge of the electrical department in 1878; an aural surgeon in 1882; a laryngologist in 1906; a physician in charge of the department for diseases of the skin in 1908, though he had been foreshadowed by the woman who cured "scald heads" in 1554; and an orthopaedic department in 1911, though this branch of surgery had been anticipated by the "bone setters" attached to the hospital in 1585. A dentist was appointed in 1836. It is perhaps not quite true to say that no speciality was officially recognized before 1870 because there was always a "cupper" attached to the hospital, one of the surgeons was always paid as a "lithotomist," and for a short time there were "cutters for wens and ruptures" (see also pages 98-117).

THE APOTHECARY'S SHOP



HE surgeons found their own drugs for many years after the refoundation of the hospital, and it was not until 1614 that an apothecary's shop was suitably equipped. A series of formulae for the medicines in more common use soon became standardized, and a hospital pharmacopoeia thus came into existence. From small beginnings the "shop" has attained its present colossal proportions under a series of exceptionally able apothecaries who, of late years, have revived the name of dispenser, though the dispensator of the original hospital had very different duties to perform.

Nothing is more remarkable in the history of the hospital than the letter which the treasurer, as the head of the executive, wrote to the committee of the hospital in 1823, in which, after mentioning the great general increase in the expenses of the apothecary's shop, he says: "In the article of leeches the evil is of still greater magnitude." In the year previous to his appointment the annual consumption of leeches was 22,000; for the year 1821 it was 24,700; in the following year it was at the rate of 52,000, or 1,000 a week. "It does not appear," the writer goes on to say, "that this

increase is in any degree to be attributed to a change in the practice of bleeding for the cupper's bill, for the last quarter has very considerably increased." The actual cost of the leeches in 1823 was £187 14s. 6½*d.*, whilst the cupper received £46 18s. in fees. In addition to the cupper and the leeches the surgery man cupped the out-patients and the casualty patients; the assistant apothecary cupped the in-patients when he was called upon to do so; and the surgeons' apprentices took their share of the work.

In spite of the protest of the treasurer, it was not until 1837—the year of the accession of Queen Victoria—that the use of leeches reached a maximum. No less than 96,300 were employed in that year, and there were 50,557 patients under treatment, of whom 5,432 were in-patients. Each in-patient, therefore, could have had seventeen fresh leeches, to say nothing of the wet and dry cuppings to which he might have been subjected, truly the apotheosis of blood-letting even for a plethoric and constipated nation!!! (see also page 121).

Sir James Paget had a clear recollection of this time, for he entered the hospital in 1834, and he told us that the leeches were used for nearly all active inflammations and congestions; for active reactions after injuries, especially of the head, chest, and abdomen, or after some operations such as hernia or lithotomy; for apoplexies and concussions. A full, hard, or firm pulse, a hot skin, quickened breathing, flushed face with a local pain, these were generally enough to justify some loss of blood, and the quantity was the greater according to what was deemed the judicious boldness of the surgeon.

Besides, general bleeding was used for another purpose; that of producing faintness for the sake of muscular relaxation, such as can now be obtained with chloroform or ether. Thus for herniae difficult to reduce it was common to bleed the patient while he was in a warm bath; and often, when he fainted, the hernia could be put back. "You would deem it a strange sight," says Sir James Paget, "to see a dislocation reduced as they often were. The patient was set upright in a chair, his arm tied above the elbow, and the blood let flow from a very free opening in the vein below the tapæ. So it flowed on and on; and its quantity was hardly measured; it had to be enough to make him faint: and at last he would begin to look pale, and his head would droop, and his forehead sweat; and then he would sink down and slide on his chair, and be hardly conscious, and wholly unable to resist the force with which his dislocated limb was pulled and lifted and set right. Very horrible, was it not? But what would you do now without anaesthetics?"

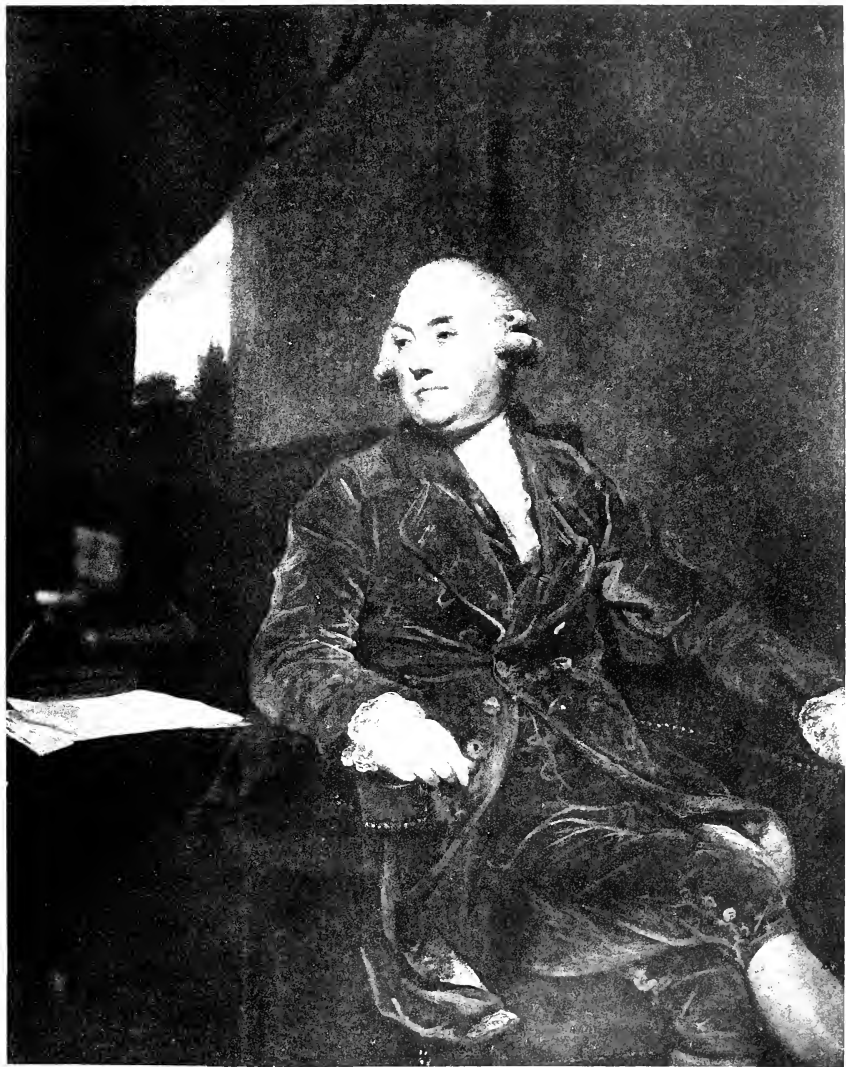
By a process of devolution of duty the apothecary being a qualified medical man was allowed to see and treat the minor medical ailments from which a large proportion of the casualty patients suffered. The custom was continued until 1870 when special officers, called casualty physicians, were appointed for the purpose.

The accounts of the apothecary's shop form an interesting measure of the attitude of the medical and surgical staff towards the advances in their art. Thus iodide of potassium, the value of which as a drug had been demonstrated as early

as 1821, had only come into extensive use in the hospital in 1836; and cod liver oil, the beneficial effects of which had been proved by Dr. Hughes Bennett in 1841, was not ordered until June 1846. Whilst the first appearance of chloroform in the ledgers is 27th November 1847, about a fortnight after the appearance of Sir James Y. Simpson's pamphlet on "Chloroform as a Substitute for Sulphuric Æther in Surgery and Midwifery" (see also pages 110 and 118-123).

THE MUSEUM

The Pathological Museum has always been closely associated with the hospital, and the governors have pursued a consistent and enlightened policy in maintaining it at the highest standard of excellence. The earliest record of its existence is the minute of June 3rd, 1726: "Two convenient rooms being prepared under the Cutting Ward, one for the more decent laying the dead patients before their burial, the other a repository for anatomical or chirurgical preparations, it is ordered that the Sister of every Ward do for the future by the Beadles lay the dead patients in the room aforesaid and that the Sister of the Cutting Ward do keep the key of the Dead Room. It is likewise ordered that whatever preparation should be given to the repository shall be numbered and the name of the person who gave it and the history of it be entered in a book to be kept at the Compting-house for that



PERCH ALL POTT, F.R.S.
after Reynolds

purpose. And that Mr. Freke do keep the key of it who shall be accountable for the loss of any preparation ; and when he shall decline it the youngest Assistant Surgeon shall do the same."

Percivall Pott gave preparations to the collection, some of which are still there ; Abernethy and Edward Stanley presented their collections in 1828, and engaged not to make separate ones, but to add all the preparations and drawings which they might afterwards obtain to those already in the museum in order to make it as ample and useful as possible. The gifts were noble, for at that time a well-equipped museum of anatomical and pathological preparations was a part of the stock in trade of every physician and surgeon who gained his living by teaching when the private schools were at the height of their reputation. They were bought and sold freely, often realizing large sums of money. The governors accepted the offer gratefully and caused a catalogue of the whole museum to be printed as a quarto volume of two hundred pages. The gynaecological series was afterwards enriched by the addition of the collection made by Dr. John Tricker Conquest (1789-1866), who had been lecturer on midwifery in the medical school. Sir James Paget was appointed curator of the museum in 1834, and his zeal and energy in this position did much to promote his after success in the hospital. He prepared a new catalogue in 1846, which is marked as much by the precision of its language as by the accuracy of the descriptions.

With this history the museum, as might be supposed, is

full of preparations, many of which have attained a world-wide recognition, for they have appeared in countless textbooks as illustrations of various morbid processes. Arteries and their diseases and injuries; inflammation and tumours of bone are especially well represented. The original specimens of Pott's disease of the spine; of Paget's osteitis deformans, and of Eve's tumours of the jaw are there, and to counterbalance them as examples of missed opportunities for fame are preparations of congenital dislocation of the hip; tabetic arthropathy; melanotic sarcoma; typhoid ulceration of the bowel, and other specimens placed there by those who, having eyes, saw not.

THE LIBRARY

The library is housed on the ground floor of the building which accommodates the museum on its top floor. It is a well-arranged room, rather too low, and only recently sufficiently lighted for the purpose of serious study. It contains an *Athenae* of the writings of those who have been trained at St. Bartholomew's Hospital which might easily be made much more complete than it is at present. It would then serve to demonstrate the great advances which the *alumni* of the school have made in the science and practice of their art.



John Abernethy, F.R.S.

JOHN ABERNETHY, F.R.S.
after Penny

THE MEDICAL SCHOOL

The medical school grew up gradually. It was the direct outcome of the system of apprenticeship required first by the trade guilds of the City and afterwards by the livery companies. The Barber-surgeons' Company, which had a monopoly from 1540 to 1745 of licensing surgeons to practise in London and for seven miles round, demanded an apprenticeship of seven years and the passing of an examination before the licence was granted. The apprenticeship involved the payment of fees both to the company and to the master to whom the boy was bound. The hospital surgeons were able to offer better opportunities than those who were not attached to the public charities, and they consequently obtained the choice of pupils and could demand larger fees. Their apprentices gradually obtained a prescriptive right to the reversion of their masters' places at the hospital, and thus arose a bad system of in-breeding which was not broken on the surgical side at St. Bartholomew's until Sir James Paget was elected assistant surgeon without having been apprenticed to a hospital surgeon, and without having served the intermediate stage of house surgeon.

It is not surprising, therefore, that there is no record of the actual beginning of the medical school of St. Bartholomew's Hospital, although it appears that students were in the habit

of attending the hospital practice in 1662. It was determined in 1667 that there should be a library for "the use of the Governors and young University scholars." Dr. Radcliffe and Dr. Mead were among the number of the governors in the eighteenth century when further encouragement to instruction was given by the formation of a museum. In 1734 leave was granted to any of the surgeons or assistant surgeons "to read lectures on Anatomy in the dissecting room of the hospital." The first person to avail himself of the permission was Edward Nourse, and the syllabus of his lectures is still extant in the British Museum. This permission to lecture and to have a dissecting room is interesting in the history of surgery, for in 1714 William Cheselden, the great operating surgeon at St. Thomas's Hospital, had been called before the court of the Barber-surgeons' Company and had been publicly reprimanded for that he "did frequently procure the Dead Bodies of Malefactors and dissect the same at his own house contrary to the Company's by-law in that behalf." Nourse's lectures prospered, however, in spite of their formal character, and they were continued in 1765 by Percivall Pott, his friend and former pupil. Pott enhanced their lustre and soon had a very large audience which was not limited to the pupils of his own school, as anyone could gain admission on payment of the lecture fee. John Hunter was among the number. About the same time Dr. William Pitcairn, and a little later Dr. David Pitcairn, his nephew, gave occasional lectures on medicine, but no attempt was made to afford any systematic instruction in medicine or surgery. It was not



Mr. Liddon has also attended three courses of lectures on the Theory & Practice of Medicine, & three courses of Anatomical Lectures, given by Abernethy.

CERTIFICATE OF ATTENDANCE AT LECTURES
 given by Abernethy in 1822

required by the College of Physicians or the Company of Surgeons in London, who had a limited jurisdiction, nor by the Universities of Oxford and Cambridge, which claimed a wider licensing power.

John Abernethy, elected assistant surgeon in 1787, is justly looked upon as the real founder of the medical school which exists at present, and with him must be associated the name of Dr. David Pitcairn, who first pointed out the relationship of rheumatism and heart disease. Abernethy took upon himself the duty of lecturing upon anatomy, physiology, and surgery with such success that a new lecture theatre was built for him in 1791 and a larger dissecting room in 1822. Students from all parts crowded to hear his lectures on surgery which were given in the evening. Of these lectures Dr. Latham, one of his pupils, gives the following account: "The great Lord Chatham, it is said, had such power of inspiring self-complacency into the minds of other men that no one was ever a quarter of an hour in his company without believing that Lord Chatham was the first man in the world and himself the second, and so it was with us poor pupils and Mr. Abernethy. We never left his lecture-room without thinking him the prince of physiologists and ourselves only just one degree below him. His mode of entering the lecture-room was often irresistibly droll—his hands buried deep in his breeches pockets, his body bent slouchingly forward, blowing or whistling, his eyes twinkling beneath their arches, and his lower jaw thrown considerably beneath the upper (plate 21). Then he would cast himself into a chair, swing

one of his legs over an arm of it, and commence his lecture in the most *outré* manner. The abruptness never failed to command silence and complete attention." An engraved certificate given to a student in 1822 for attendance at anatomy lectures and signed by Abernethy and Edward Stanley is reproduced here (plate 22).

The very success of Abernethy's teaching gave undue pre-eminence to surgery, and Sir Robert Christison, writing during a visit to London in 1820, says of St. Bartholomew's: "The medical students were only three in number whilst the surgical students, amounting to several hundreds, never entered a medical ward and, though pupils, in reality got no more information in medical practice than the few crumbs they might pick up now and then during the medical treatment of surgical cases." Yet the physicians were men of the highest culture. Of Dr. David Pitcairn (plate 23) we read that "he was a loveable man, tall, erect, and strikingly handsome in his youth, retaining his good looks to his life's end; one of those to whom his friends and colleagues always turned for help and advice in time of sorrow, need, sickness, or any other adversity. His manner was simple, gentle, and dignified; from his kindness of heart he was led to give more attention to his patients than could well be demanded from a physician, and as this evidently sprung from no interested motive, he often acquired considerable influence over those whom he attended during sickness. No medical man, indeed, of his eminence in London perhaps ever exercised his profession to such a degree gratuitously, says one who knew



DR. DAVID PITCAIRN
after Hoppner

him personally, besides few physicians ever gained so extensive an acquaintance with the various orders of society. He associated much with gentlemen of the law, had a taste for the fine arts, was a Fellow of the Royal Society as well as of the Society of Antiquaries." The rising medical school on the physicians' side was greatly helped by Dr. John Latham and his son, Dr. Peter Mere Latham, who were both admirable teachers; indeed, Dr. P. M. Latham's "Lectures on Subjects connected with Clinical Medicine," published in 1836, are still reckoned amongst the *opera aurea* of English medicine, both for their style and substance.

A sound knowledge of botany was required by the Society of Apothecaries from 1815 onwards of every student who applied for the licence. The botany was taught by the hospital apothecary, who took the students a series of picnics called "herborizings," in which, during a long morning's tramp through the lanes in the London suburbs, they were made to pick the various plants growing by the wayside, which were afterwards produced and identified during the midday meal of bread, cheese, and beer.

A chemical theatre was built in 1854, but it was not until 1866 that a chemical laboratory was attached to it.

As early as 1843 the governors established a residential college, with a warden to exercise discipline and preside at the common meal. They were fortunate in their choice of Sir James Paget as the first warden.

The increasing requirements of medical education made it necessary at last to provide more ample accommodation,

and in 1876 the old and scattered school buildings were pulled down and replaced by the present block containing the library, physiological class-rooms, and museum, with lecture theatres and dissecting rooms as an annexe. The block is partly built upon the site of the old Hartshorn, or Giltspur Street, gate, the position of which is still marked by the abrupt ending of the roadway opposite the entrance to the school buildings. It was opened in 1881 by the Prince of Wales, afterwards King Edward VII, then president of the hospital.

The process of rebuilding continued, and the pathological institute was opened in 1909 (see also pages 124-138). It contains the staff common room; a very complete series of pathological class-rooms and work-rooms, as well as the post-mortem room and sufficient accommodation for preserving the clinical records so that they are easy of reference.

In 1921 the medical school which had hitherto been a voluntary association of teachers, was granted a charter of incorporation with a common seal (plate 24) under the title of "The Medical College of St. Bartholomew's Hospital in the City of London." The administration of all matters connected with the school has consequently passed to a governing body with proper provision to safeguard the interests of the hospital, who are the owners of the premises occupied by the medical school, as well as of the land upon which it stands.



THE SEAL OF THE MEDICAL COLLEGE

1921

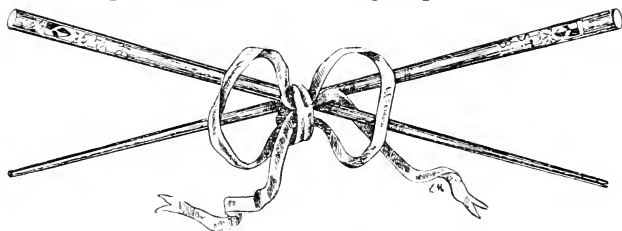
THE GOVERNMENT OF THE HOSPITAL

No great change took place in the government of the hospital so long as it remained a religious foundation, and even when Henry VIII took the revenues into his own hands, and gave it a new constitution in 1544, an attempt was made to continue it along the original lines. A master was appointed who was in orders and four chaplains, but they proved themselves so negligent that the City authorities took the matter into their own hands in 1547, and determined to govern the hospital on the lines which had long proved successful in the livery companies. A Court of Governors was set up consisting, in part of members of the Court of Aldermen and Common Council, and in part of co-opted members who had shown their interest by contributing to the upkeep of the charity. This general body or Court of Governors was presided over by the Lord Mayor in the earlier times, by the Prince of Wales in the last three reigns. From the general body of the governors a smaller body is chosen, called the House Committee, with the treasurer as the executive officer of the hospital. From the House Committee a still smaller body is appointed, known as "The Treasurer and Almoners" Committee, which takes the initiative in all matters connected with the affairs of the hospital. To ensure against stagnation the members of the House Committee and

the Almoners only serve for a limited term of years, though the treasurer is a permanent officer. The secretary, in accordance with the common use in City companies is called "the Clerk."

The constitution thus formed in the Tudor period has undergone but little change. It has always proved itself sufficiently elastic to meet the altered needs of the times, and has yet been conservative enough to give stability to the institution. Every governor on his election is given a staff, shaped like a billiard cue and painted green—the heraldic tincture of the Tudors—and bearing the arms of the hospital, "Per pale argent and sable a chevron counterchanged" (see page 77), with the letters "St. B.H." below it in white. The governor also receives a "charge" as to his duties at the time of his admission.

When Gibbs built the hospital he provided for this form of government, and built the treasurer's house, and a large hall (plate 12), approached by a grand staircase (plate 9), for the meetings of the General Court of Governors, as well as for the banquets which are an integral part of civic life.



GOVERNORS' STAFFS

THE HOSPITALER

The hospitaler, with the assistant hospitaler, are the direct descendants of the three chaplains attached to the hospital when it was founded. The hospitaler was at first a person in orders to whom some of the duties now undertaken by the steward were assigned. He looked after the food, signed certificates, and dealt with the property of the patients. There was also a vicar of the parish of St. Bartholomew-the-Less, but from 1680 the offices of hospitaler and vicar have been combined, his duty being "to pray, console and reade to the poor and to tend and exhort such as are sicke in their wards." This could have been no light occupation at the time when there were no newspapers, few books, and the majority of the patients were unable to read or write. The order of religious services laid down for the patients by the Lord Mayor and Aldermen in 1552 declares that there shall be : "A daily service for the poor at the hour of eight of the clock in the morning and four of the clock at the afternoon throughout the whole year, there shall a bell be rung for the space of half a quarter of an hour and immediately upon the ceasing of the bell (the poor lying in their beds that cannot arise ; and kneeling on their knees that can arise in every ward as their beds stand) they shall in order as many as can read begin these prayers following. And after that the party whose turn it shall be hath begun all the rest in the ward shall

follow and answer upon pain to be dismissed out of the House. And thrice in the week that is to say Sunday, Wednesday and Friday they shall say the litany. The Minister shall begin and the rest shall follow."

The morning service was of considerable length. It began with the Lord's prayer and responses; two psalms; an anthem; a third psalm; the lesson for the day; the Benedicite; the Kyrie; the Creed; more responses and prayers for the King, the governors of the hospital, and the sick poor themselves.

The afternoon prayers were no shorter; they consisted of the Lord's prayer and responses; the eighty-sixth and the ninety-sixth psalms; the lesson and the fifty-seventh psalm, with the Kyrie, and "all the Suffrages and Collectes used in the mornynge praier."

There was also the evensong prayer at seven of the clock at night, consisting of the Lord's prayer, the one hundred and twenty-first psalm, and a collect. The day's prayers ended with the words: "God save our sovereign Lord the King, all the Governors of this house, and the Holy Church universal, and grant us peace in Christ and grace for ever. Amen."

These prayers must have taken up a considerable portion of each day, and the minister and his staff were not overpaid as appears from the entry, "To the ministers of the church within the Hospital that is to say to a Vicar, a clerk, and a sexton £23 6s. 8d." The hospitaler sometimes found time to mend the bodies as well as the souls of his patients, for in 1592, and on several other occasions, he applied for "his

THE PAST

67

charges and pains in setting the bones and joints of the poor of this house." After one of these applications his bill " was ordered to be examined and reported upon. He was paid thirty shillings but was directed to tell the porter at the time what cures he does in the future."

THE STEWARD

The steward has the most onerous and exacting post in the hospital. He supervises the feeding of the patients, and he is the official intermediary between the public and the hospital. The admission and discharge of patients is a part of his office ; he interviews the friends ; he deals with the querulous, overwrought, and discontented. He has to find beds for urgent cases when the hospital is already full, and he has to arrange for the transfer of patients from one ward to another. He deals with the innumerable troubles and delinquencies of the house physicians and house surgeons, is their kindly mentor, and often acts as their safety valve. He is, moreover, always accessible, for he lives in the hospital. Officially he works in the steward's office, a fine old-fashioned room, with a large open fireplace in the grandest style of the eighteenth century, but his multifarious duties rarely allow him to remain in his office. We have been fortunate in our stewards since Mark Morris (plate 25) was appointed to the post in 1859. His geniality, tact, ready wit, and sound common

sense, added to the fact that he was fatigue-proof, set a tradition in his thirty-six years' service that has continued to the present time, and has caused the hospital name to stand in good repute with every class.

THE BEADLES

The beadles of the hospital came into existence immediately after the Reformation, when the parish of St. Bartholomew-the-Less was established; they are therefore partly officers of the parish, and partly of the hospital. Their duties were clearly defined from the very beginning. They were eight in number, and their charge was that: "Your office and charge is to give attendance from time to time upon the Governors of this House and to do such business as they shall assign to you. On all such days as the Governors of this House shall not sit in this Hospital for the affairs of the same ye shall separate and divide yourselves into the sundry parts and liberties thereof every man taking his several walk. And if in any of your walks ye shall happen to espy any person infected with any loathly grief or disease, which shall fortune to lie in any notable place of this City to the noyance and infection of the passers by and slander of this House, ye shall then give knowledge thereof to the Almoners of this Hospital that they may take such order therein as to them shall be thought meet.



MARK MORRIS
Steward, 1859-1895
after Oakes

“ Ye shall also have a special eye and regard unto all such persons as have been cured and healed in this House that none of them counterfeit any grief or disease, neither beg within the City and liberties thereof. And if ye shall fortune to find any so doing, ye shall immediately commit him or them to some cage and give knowledge thereof to the Governors of this House that they may take further order as they shall think best.

“ Ye shall not haunt nor frequent the company of any poor and beggarly person (that is to say) to drink or eat with them in any victualling house or other place, neither shall ye receive any bribe or reward of any of them, lest by occasion thereof you should winck at them and so lewdly licence them to beg, upon pain to be dismissed this House.

“ And ye shall not suffer any sturdy or idle beggar or vagabond to beg or ask alms in this City of London or the suburbs of the same, but ye shall forthwith commit all such to ward and immediately signify the name and surname of him or them to the Aldermen of that ward where ye shall apprehend any such beggar, or else to the Lord Mayor, that execution may be done as the law in that case provideth. This is your charge.”

In addition to this charge relating to the main duties of the beadles there exist their more detailed orders which are of equal interest. It was directed that : “ First, you shall every day two and two together walk through your wards appointed with your staffs in your hands ; and all such vagrant and idle persons as you shall find in your walks or in any place abroad

you shall apprehend and convey to the Bridewell. And if you chance to be resisted by the way, of the said vagrants and evil persons, you shall call for aid to every constable next adjoining to assist you. And if he refuse to do so, to take his name and go to the Lord Mayor and deliver unto him the disobedience of the said constable. And if the Lord Mayor do not presently cause such constable to be punished then at the next Court of Aldermen you are to attend and make your complaint, whereby the law may be executed accordingly.

“ Item, if any of your citizens die within your walks you are to give your attendance at the houses of them so deceased and to see that no rogues or idle persons resort thither to trouble the street. And if anything be given you of benevolence for your travail to take it thankfully without calling ought of duty. And if you be not of yourselves able to clear the streets of such; then you shall call to your aid such beadles whose walks are next adjoining. And you shall distribute to them half of such money as shall be given unto you. And you shall not intrude yourselves to none other burials out of your wards or walks but unto such as you shall be called by your fellow beadles.

“ Item, One of you every Sunday with the rest of the beadles of the other houses shall give your attendance at Paul's Cross at the sermon time to visit all the streets and lanes adjoining and there to apprehend all such vagrant and idle persons as shall be there found by you and to carry them as well men as women and children to Bridewell;

whereby there may be order taken according to the law prescribed.

“ And if any of you shall be found negligent in performing these orders abovesaid or any other orders hereafter made and devised upon every fault found your staff shall be taken from you and to be secluded for evermore from serving in those rooms. Whereof assure yourselves without any favour or otherwise to be punished according to the Governors’ discretion.”

It is clear, therefore, that the beadles of the hospital were persons of importance in the City, that they had ample authority to maintain order, apprehend rogues, and compel the sick who were a menace to the public health to come to the hospital for treatment. They are now reduced to two, and they may still be seen often in the hospital, sometimes in Cheapside, more rarely in Oxford Street, wearing their uniform of a wide-skirted black coat with a silver badge of the hospital arms on the right breast, and the regulation cap of black with a narrow white piping—the hospital colours.

PECULIAR CUSTOMS

VIEW DAY.

There are several customs peculiar to the hospital which are worthy of notice. The most remarkable, perhaps, is that of “ View Day,” which may be coeval with the foundation of the hospital, and may be the secularized memory of some

great event in its history, the beginning of the work for instance or its dedication on completion. It is a survival from pre-Reformation days, for it was held as nearly as possible to the feast of St. Patrick—March 17th—quite early in the morning. In 1586 the governors were summoned for seven o'clock, and began with a short religious service in the church, as if, originally, there had been a mass. In these more degenerate times it is fixed for 2.30 p.m. on the second Wednesday in May, and is not preceded by a church service.

The treasurer and governors with the clerk, matron, and steward, meet together and form a procession, preceded by the head porter carrying his staff of office which bears a figure of St. Bartholomew modelled in silver. Every part of the hospital is inspected, the head of each department being present with his staff of assistants. The whole ceremony lasts from two and a half to three hours. As the door of each ward is thrown open the head porter announces in a loud voice "The Treasurer and Governors!!!" The procession advances to the centre of the front ward, where a table and chairs have been placed, the physician or surgeon in charge of the ward with his assistants stand on one side, the sister and nurses on the other. The treasurer and the matron seat themselves and the steward reads from a book the name and age of each patient in the ward. As each name is read out the physician or surgeon states the disease or injury from which the patient is suffering and the probable duration of stay in hospital. When all the names have been read out the treasurer turns to the physician or surgeon and says, "are

you satisfied with the conduct of this ward? ” He then turns to the matron and asks, “ Matron, are you satisfied with the nursing of the ward? ” Having received their answers the steward says “ does any patient wish to speak to the governors? ” The procession is then reformed, and the visitation is continued block by block and ward by ward. The ceremony used to end with a banquet known as “ The View Day Dinner,” which has been discontinued since 1900. It was held in the Great Hall of the hospital. The invitations were sent in the name of the treasurer to those interested in the work of the hospital, including the medical and surgical staff, the teachers in the school, and the prizemen of the year. It afforded a useful opportunity to review the state of the hospital during the year just past, and to receive suggestions for further improvements.

THE BUCK FEAST.


From very early times, too, there was a second dinner at the end of July, called “ the Buck Feast,” because venison always formed part of the menu. It was given at the expense of the newly elected governors and the invitations were issued jointly in their names. It may have been held originally in honour of the Royal Bounty, which frequently took the form of a present of a buck for those whom the King delighted to honour. Like the View Day Dinner, it has now been discontinued for many years, the last one having been held in 1903 (see also page 82).

SURGICAL CONSULTATIONS.

Every Thursday, at half-past one, the surgeons and assistant surgeons meet together at "Consultations," which are held in the presence of the students, who learn that widely divergent opinions may be expressed on a case, that surgeons may differ amicably and that experience and a good memory may shed light on the most obscure conditions. The patient is brought in and the surgeon gives his reasons for asking the advice of his colleagues either on account of a difficulty in diagnosis or treatment or simply on grounds of rarity. Each surgeon in order of his seniority examines the patient, and when all have done so the patient is removed and the surgeon in charge states his opinion and the diagnosis or method of treatment which he suggests. Each surgeon, the senior first, then gives his opinion and the reasons for it. The surgeon in charge of the case finally states whether he agrees or disagrees with what has been said. "Consultations" seem to have begun about 1860, but it is very tempting to trace them back to the old method of the Middle Ages, by which a surgeon having under his care a patient in danger of death or maim was held blameless if he had shown the case to the governing members of his craft within three days of the injury, whilst he was liable to fine and imprisonment if he had failed to do so.

D'A. P.

THE HOSPITAL ARCHIVES AND POSSESSIONS

URING the 800 years of its existence the hospital has accumulated a great store of manuscript deeds, charters, and records of historical importance. Many of these have been described and reproduced in Sir Norman Moore's *History*, and it would be outside the scope of the present volume to enter into any detail respecting most of them. A few, however, which seem to be of outstanding interest by reason of their bearing on the history or the intimate life of the hospital will be briefly described, together with some of the more remarkable objects acquired by the hospital since the year 1600. Some of these, such as the chandelier now hanging in the Steward's office, partake, by their familiar presence, of the daily life of the hospital, although the reason of their existence may be unknown to most of those who pass them so often on their rounds.

GRANT BY RAHERE TO HAGNO.

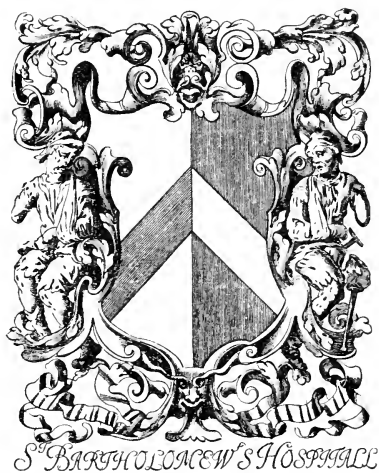
The earliest document in the possession of the hospital is dated 1137, "the second year moreover of the reign of King

Stephen in England." This is a deed by which Rahere and the Convent of the Church of St. Bartholomew grant the Church of St. Sepulchre to Hagno the clerk on the condition that he pays a yearly sum of fifty shillings for the use of the Canons and of the poor abiding in the hospital. The seals of the convent and of the hospital, which must have been affixed in Rahere's presence, are still attached to the document. That it has remained in the possession of the hospital is to be explained by the fact that Rahere was succeeded by Hagno as master in the same year in which the deed was granted. It has never passed out of the keeping of the governing body, though it may once have left the hospital precincts when, on 3rd September 1666, some of the archives were sent in trunks to Hornsey for safety during the Great Fire.

DEED OF 1423 AND THE HOSPITAL ARMS.

John Wakeryng, otherwise Blackberd, was elected master of the hospital on 2nd March 1423, and held office there until 1462. The earliest transaction after his election of which there is a record is an agreement dated 14th June 1423, with the Prioress of St. Helen's as to a drain and waterfall in Mugwell Street in the parish of St. Olave. The deed is of special interest because there is attached to it the master's seal, on which appear for the first time the arms now recognized as those of the hospital. The shield—party per pale argent and sable a chevron counterchanged—appears therefore to have been really that of John Wakeryng, and only from constant use in the seal of his signet ring during a period

of forty years ultimately to have passed into the common use of the hospital. In Wakeryng's seal the shield is surmounted by a crucifix with a tree at each side and an Agnus Dei at the



THE HOSPITAL ARMS WITH BASTARD SUPPORTERS

apex. In the border is inscribed, "Sigillum magistri hospitalis sancti Bartholomei Smythfeld ad causas" (see also page 9).

THE CARTULARY.

The Cartulary, or Charter Book, of the hospital is to the ordinary eye by far the most attractive volume in the archives, and it is in addition of great historical value.

A book of this kind was made for every corporate body in mediaeval times, and contains "a record of all rents due to the hospital, of the lands whence they were paid, and of all the deeds of gift and other charters relating to those lands, as well as of the papal bulls, and royal charters granting or confirming the property and privileges of the hospital" (Moore's *History*, ii, 21). The volume is a large folio of 636 vellum leaves. It was compiled and written by Brother John Cok, who began his labours at Easter 1456, at the age of 64, and laid down his pen, as he himself says "in the evening of his life," in 1468. Only through the medium of Cok's Cartulary has a great part of the early history of the hospital been preserved, and it is clear that his devotion to St. Bartholomew's was as great as that of any its servants has ever been before or since. John Cok was born in 1392 and was apprenticed early in the reign of Henry V to Thomas Lamporte, a goldsmith. He records in the Cartulary that on the 9th April 1413, "which was Passion Sunday and a very rainy day," he witnessed the Coronation of Henry V at Westminster. After spending a few years at his craft, he was employed in 1418 as a scribe by Robert Newton, a former master of St. Bartholomew's Hospital. In 1421 he became a brother of this foundation, and here he worked for the remainder of his life. He was Renter of the hospital at the time when he was writing the Cartulary. The book contains two elaborately illuminated capitals, one of which, containing a portrait of Brother John Cok, is reproduced in plate 26. He is represented as an elderly man in a red gown and a black cap,



BROTHER JOHN COK

1392-1468

from the Cartulary

the livery of the trade to which he had formerly belonged. He is kneeling before a cross supported by three angels, and at the foot of the cross appear his arms—sable between three cocks a chevron argent bearing an annulet for difference. The pleasure with which he laboured at the writing of the Cartulary is expressed in the numerous capital letters with which he ornamented the margins of his pages. These are carefully drawn according to the dictates of his fancy and represent all manner of curious animals and conventionalized



FROM COK'S CARTULARY

heads and figures. Tracings from a few of these have been reproduced in the present volume. The hospital archives contain another smaller manuscript volume of charters and documents in the handwriting of John Cok. There is also in the British Museum a third manuscript of his making, but this is not in any way connected with the hospital.

THE CHARTERS OF HENRY VIII.

The years 1544-1547 cover the critical period which saw the hospital safely re-established by the act of the King, who had already so nearly destroyed it by his spoliation of the

associated monastery. The hospital possesses three documents of this time bearing the authority of Henry VIII. By the first of these, dated 23rd June 1544, he granted letters patent reconstituting the hospital for its original uses. This charter had effect for less than three years, and on 27th December 1546 a Deed of Covenant was drawn up by which the hospital with all its contents and most of its former possessions were granted by the King to the Mayor, Commonalty, and Citizens of London, various provisions being made for its administration. The great seal of Henry VIII is still attached to this document. Finally, the possessions of the hospital were further established by a grant of letters patent dated 13th January 1547, each piece of property being separately mentioned.

It is on the Deed of Covenant of 1546 that the present constitution of the hospital is founded.

PORTRAITS AND MEDAL OF HENRY VIII.

The period of the charters of Henry VIII is further commemorated in the hospital by a three-quarter length portrait of the King dated 1544. The picture is similar to several other extant portraits of the King painted towards the end of his life. It hung formerly in the Great Hall, but it was replaced in 1738 by the larger full-length portrait which had been given to the hospital by Mr. Benjamin Sweet. The smaller painting now hangs in the committee room.

The hospital also possesses a fine gold medal of Henry VIII struck in 1545. This was given to the hospital

by Mr. Thomas Brown, an enthusiastic numismatist, in 1866. The Deputy Keeper of the Coins at the British Museum states that this is a genuine and valuable medal. It is one of the earliest of British medals, and an instance of medalistic portraiture. It was struck at the command of Henry VIII, probably to indicate his assumption of the title of Supreme Head of the English Church. It was made by Henry Bayse (or Basse), the engraver to the Mint. It is suggested that the medal was used for the purposes of propaganda.

THE REPERTORY.

When the hospital was reconstituted under the charter of Henry VIII the Renter was directed to keep a record of the foundation of the hospital and particulars of all the hospital possessions. The book containing these records, known as the Repertory, was drawn up in the years 1544 to 1547. This volume contains in addition a number of maps and plans of hospital properties made at somewhat later dates. One of the most important of these, giving a plan of the hospital buildings in 1617, has been reproduced in the present volume (plate 5).

THE LEDGERS.

These volumes record the receipts and expenditures of the hospital, and they have been kept with remarkable fullness and accuracy since the year 1547. The first volume covers the years 1547-1561. The Ledgers were used as evidence in the Court of Chancery in 1878 during an appeal concerning

the payment of some tithes, the amount of which had been fixed in 1545.

THE JOURNALS.

In these volumes are contained the proceedings at the meetings of the governors of the hospital, and their records extend uninterruptedly from the year 1549 to the present time. The first volume covers the years 1549-1561 and the first entry is as follows:

“ The iiij of October an^o 1549—At the assemble yn the persons of Mr. Dobbs, Mr. Whyt, Mr. Lyon, Aldermen: Mr. Clarke, Mr. Vycars, Mr. Morton and John Blundell thes thynges were don—

“ The master coke, the butlar, the porter, the viii bedelles and the matrone shall haue for theyr wynter lyuerys so muche russett frysse for ther cottes and hur a pettycotte.”

The earlier part of the book also contains some other records, such as the churchwardens' accounts of St. Nicholas-in-Shambles, 1526-1546, and a list of persons healed, 1549-1550.

THE FEAST BOOK.

It has been mentioned on page 73 that an annual dinner was held from very early times in the month of July at the expense of the newly elected governors. It was known

as the Buck Feast, the King's venison being a regular part of the menu. A record of these banquets, which were held in the Great Hall, was kept in the Feast Book, the earliest entry being made about the year 1672. The first full menu was recorded in 1684.

SOLDIERS RECEIVED INTO ST. BARTHOLOMEW'S HOSPITAL.

A volume with this heading contains: "An accompt of his Ma^{ties} Forces sent to St. Bartholomew's Hospital by James Pearse Esq., surgeon generall Between ye first of January, 1688, to the last day of February following inclusive, setting forth whats due to the Hospitall accompting 4^d p. diem for each man according to his late Ma^{ties} warrant dated 28th of May 1686." The record gives particulars of the officers and soldiers admitted and discharged with their length of stay and the money due. It is recorded in the Journals that a ward was set apart for sick soldiers and seamen in 1672, and that on another occasion, in September 1678, it was ordered, in response to a letter from the Duke of Monmouth, that no patients except soldiers and sailors should be admitted for the space of three weeks. This volume appears to give a detailed record of a similar episode.

MARTIN BOND'S INKPOT.

The fine pewter inkpot now in the Treasurer's office was presented to the hospital in 1619, and in it Dr. William Harvey must often have dipped his quill. It bears the

inscription: "The guifte of Mr. Martin Bonnde." The donor was Treasurer from 1620 to 1643, and his portrait hangs in the committee room. He commanded the City trained bands at the time of the Spanish Armada, and lies buried in the Church of Great St. Helen's.

THE SILVER PLATE AT ST. BARTHOLOMEW'S.

The hospital and its parish church are possessed of a number of silver vessels dating from the first half of the seventeenth century onwards, the majority of which were intended for use in St. Bartholomew-the-Less. The earliest piece is a tall cup with a baluster stem, given by "John Jones Cittizen and Marchant Taylor of London" in 1639. Two other pieces of the time of Charles I are a plain chalice and paten belonging to the year 1645. There are five pieces of the time of Charles II—a pair of plain patens given by the parishioners in 1679, a plain chalice of 1682, and two large flagons dated 1682 and 1683. Both the flagons were made by Evodias Inman, a goldsmith resident in the parish, one being his gift, the other being made from two earlier flagons which had fallen into decay. A fine decorated alms dish was given to the parish as a legacy by "the late Earle of Alisbury" in 1686. Belonging to a later date are a long pierced spoon of the time of Queen Anne and a small goblet of George I, which was originally used at the Lock Hospital, Southwark. The Head Porter's Staff is dated 1815. The hospital

has also some silver vessels of the nineteenth century, including three rose-water dishes, a ewer, and a loving cup with cover.

THE CRIPPLED SOLDIERS.

Standing in the Steward's office are two wooden effigies, carved and painted. Both represent patients of the hospital, one a full-length figure, the other a head and shoulders only. Each carries an arm in a sling and the larger supports himself upon a crutch. These figures date from the seventeenth century, and it is probable that they were the signs put up outside the special ward set apart for sick soldiers and seamen in 1672. Their origin is, however, not accurately known. A drawing of the larger figure appears on page 35 of the present work.

FREKE'S CHANDELIER.

The handsome chandelier, now hanging in the Steward's office, is made of oak, heavily gilded. It bears the inscription : "*Opus Johannis Freke hujusce nosocomii chirurgi 1735,*" and was carved by the hands of John Freke, surgeon to the hospital 1727-1755. Freke was the first ophthalmic surgeon to the hospital (see page 99), and was the first curator of the small collection which formed the nucleus of the present pathological museum. He was the friend of Hogarth and of Fielding, by whom he is twice mentioned in the pages of *Tom Jones*.

THE RENTER'S MUG AND PISTOLS.

The silver mug formerly kept in the Renter's office is that in which the tenants of the hospital were given refreshment when they came to pay their dues. Other rents had to be collected, and there is a pair of pistols with flint-locks of about the year 1800 which were carried by the Renter on his journeys.

G. L. K.



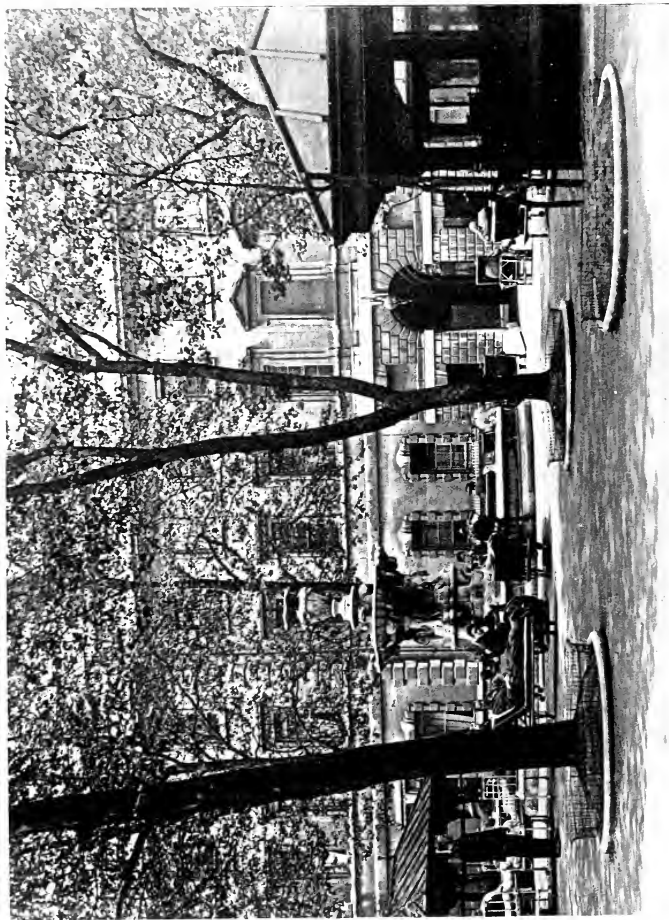
FROM COK'S CARTULARY



PART II

THE PRESENT






THE SQUIRE AND FOUNTAIN



THE PRESENT

THE HOSPITAL

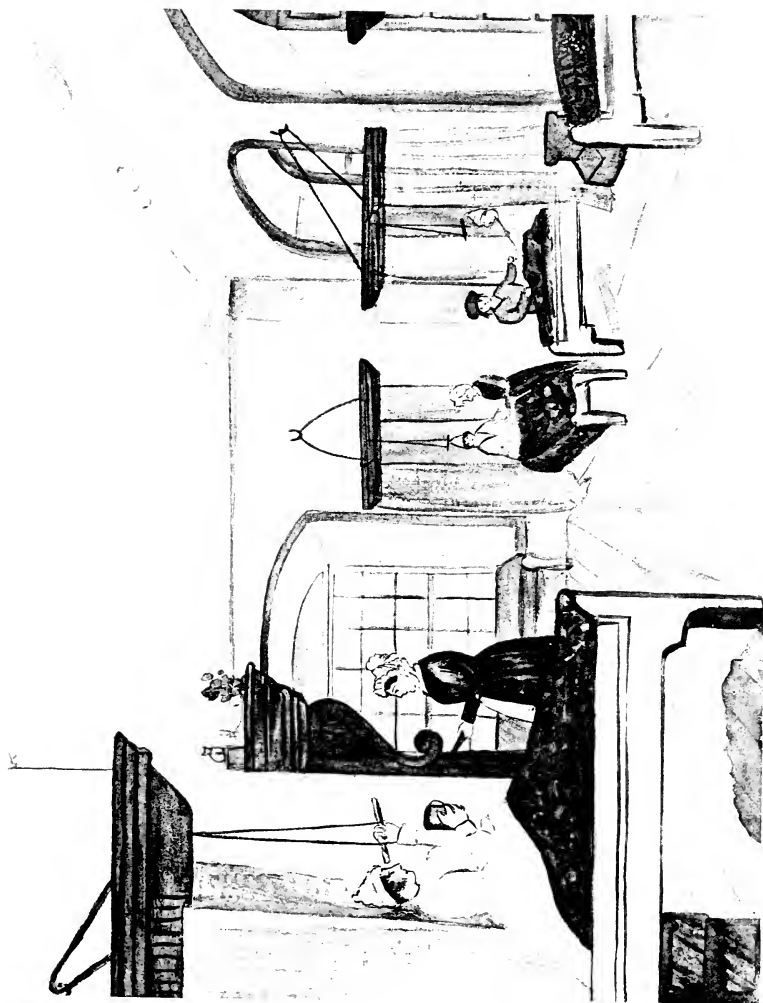
HE main buildings of the Hospital remain much as James Gibbs, the architect, left them about 1760 (plate 8). Four massive blocks built round a quadrangle, three used for wards and the fourth for administration. In the centre of the quadrangle is a fountain where students are accustomed to sit and gossip away the fine summer days. Grouped round the fountain are shelters for the patients. Looking away from it towards the south-east the Dome and Cross of St. Paul's appear very near.

The interior of the ward blocks have undergone even less change than the exterior. Lifts have been put in and an operating theatre has been built out in one block; the top wards in another have been remodelled to suit the requirements of modern midwifery and the new art of gynaecology. The wide wooden staircases with their oak balustrades remain as they were built; the wards are unaltered except

that a sanitary annexe has been added at the end of each; the sisters still sleep, live, and entertain their friends in the little room with a half-glass door which opens out of each front ward. The church was repaired in 1789 by George Dance, the architect of Newgate. He left the original walls, the vestibule, and the tower, but replaced the interior with an octagon of wood which was soon attacked by dry rot. It was replaced in iron and stone by Thomas Hardwick in 1823, and has not since been much altered.

At the back of the church and facing Smithfield is the old surgery where Dr. Robert Bridges states that he saw, as casualty physician, 7,735 patients in three months, of whom 5,330 were new cases, and that the whole annual total of medical casualty cases was 117,998, whilst the surgical casualty visits were 45,205. The room in which so much of the work of the hospital was done is now converted temporarily into cubicles for some of the nurses. Alongside it is the Abernethy block built in 1791. "Theatre A," the original theatre built for Abernethy, is attached to it. When operations were only done once a week and in the presence of the whole surgical staff this theatre was sufficient for the needs of the hospital, but many others are now in use. The old theatre was remodelled in 1913 in memory of R. B. Etherington-Smith, Assistant Surgeon and Warden of the College, who died in that year much beloved by everyone. A ward for sick members of the resident staff was built at the same time above the reconstructed theatre.

The residential college consists of a row of houses behind



WHERE I'ARD IN 1832
from a Contemporary Drawing



DARKER WARD

1922

the Abernethy block. It forms one side of Little Britain, and the centre house is occupied by the warden. Some of the houses, separated from the college by an iron gate, are appropriated to the nurses who are on the private staff. On one side of the Little Britain Gate is the small house where the steward lives, and opposite to it is the matron's lodging and some nurses' quarters. Behind them the new nurses' home is rapidly approaching completion where, for the first time in the history of the hospital, they will be properly housed. Accommodation is provided for 557 persons on the female staff, of whom 369 are engaged in the duties of nursing.

The greatest changes have taken place on the Giltspur Street side of the hospital. The shops shown in the old drawings (plate 6) have been demolished and in their place have arisen a pathological institute, medical school buildings, and a new out-patient department. These buildings were rendered possible by the removal of the Bluecoat School to Horsham in 1902. The necessity for the removal of the school had long been foreseen, and it had become a standing joke that such and such a thing would be done when the Christ's Hospital site was available. In anticipation of this event which had at last become imminent in 1901, the medical and surgical staff of the hospital wrote to the governors stating the clinical needs of the hospital and urging that the whole of the site to become vacant should be acquired. Negotiations were entered into, but the expense appeared to be too great, the result being that the hospital was only able to obtain five-eighths of an acre whilst the Post Office secured

the rest. Much time and thought were devoted during the years 1902 and 1903 to the best method of utilizing such additional land as could be acquired, and ten different plans were brought forward. These plans varied from a complete rebuilding of the hospital, with destruction of the church and quadrangle, to the present compromise which has raised three blocks of buildings, one on each side of the school block, for the out-patients and the study of pathology respectively, and the third the nurses' home to which reference has already been made.

The foundation stone of the out-patients' block was laid on 6th July 1904 by King Edward VII, Patron of the hospital, in the presence of Queen Alexandra, the Prince of Wales (President of the hospital), and the Princess of Wales. It was opened for use in December 1907 without ceremony. How much it was wanted is made plain by a comparison of the past and present accommodation. In 1901 the surgery, consisting of a large room with smaller rooms attached, accommodated every morning an assistant physician, an assistant surgeon, a casualty physician, a dental surgeon and his dressers, five assistant house physicians, ten house surgeons, and the ophthalmic house surgeon, forty surgical dressers, a sister, nurses, an inquiry officer, and porters. When the room was filled it held more than 600 people, and in spite of the promptitude with which the work was performed, the places of those who went out were at once occupied by fresh patients as there was usually a queue, waiting its turn for admission, on the steps of the hospital. The room remained

crowded from nine o'clock in the morning till nearly noon. In the afternoon the same room accommodated the patients sent to the surgeons for advice by outside practitioners, and to them were allotted the small rooms which had been used in the morning by the casualty and house physicians. The body of the room was also used daily for the reception of accidents and urgent cases, and after two o'clock partly as a waiting room and partly as a place for treatment by the officers in charge of one or more of the special departments. It was particularly unsuited for this purpose owing to the defective lighting and ventilation and the continual interruption caused by the passage of house surgeons and dressers. Four years later this was all changed. The present waiting hall is more than twice the size of the old reception room. There are separate entrances and accommodation for men and women. Round the central hall are twenty rooms for the casualty physicians, the house physicians, and the house surgeons. The medical and surgical out-patients can be seen in comfort upon the first floor, and the upper floors are devoted to the special departments to which access is obtained by lifts as well as by stairs.



FROM COK'S CARTULARY

THE CLINICAL UNITS

It has already been pointed out that the medical school has undergone a slow but progressive development from the time when students "walked" the hospital and were entirely dependent for their education upon the individual teacher. There were some who went round the whole of their wards without speaking a word; there were others who drew large classes to the bedside of the patients by the excellence of their teaching; and there were others again who were only seen to the best advantage with a small and carefully chosen class of advanced students. It gradually came to be recognized that this haphazard system of teaching was not in the interests of medical education generally, and when bacteriology became a science the need for more systematized methods became apparent.

It was felt between the years 1900 and 1910 that the ordinary bedside teaching must be improved, and with this end in view several members of the staff of the hospital went abroad to discover what was being done in France, Germany, Austria, and the United States. The results were placed before a Royal Commission in the University of London appointed in 1911 and known as the Haldane Commission. The findings of the Commission were, broadly speaking, in favour of creating a certain number of professorships approxi-

inating to, but not identical with, those found in some of the Continental universities. Then came the war and all schemes of advance remained in abeyance though fortunately they were not killed, for as it progressed the value of a scientific education became more and more evident. In 1918 Sir George Newman, the chief Medical Officer at the Board of Education, issued a pamphlet dealing with medical education in which he pointed out its vital importance to the nation. He suggested the formation of clinical units by which the improvements recommended by the Haldane Commission could be carried out without interfering with the excellent clinical education already afforded by the system, which was peculiarly English, of bringing the student to the bedside of the patient from a comparatively early period in his career. In other words, there was no idea of supplanting the well-tried methods, but an attempt was to be made to graft on to them a means whereby medical education could gradually be placed on a more scientific basis than had hitherto been possible.

The Treasury approved the scheme and agreed to subsidize it by the payment of a certain sum of money annually. Some of the medical schools in London were approached and were invited to suggest a means of carrying the proposals into effect. In October, 1919, the problem was solved at St. Bartholomew's Hospital by converting one of the five services on the medical and on the surgical side respectively into a medical and a surgical professorial unit. The arrangement did not disturb the older system by which the five

physicians and the five surgeons had a charge of wards independently of each other, but it changed the character of one of them. In place of a physician and assistant physician, a surgeon and assistant surgeon as heretofore, with resident medical officers and their assistants, six persons were appointed on each side to make a "Clinical" or "Professorial Unit"—the Director, who is at the same time physician or surgeon to the hospital, and has the title of Professor of Medicine or of Surgery in the University of London; the Assistant Director, who is an assistant physician or assistant surgeon to the hospital; two assistants of the status of demonstrators; and two junior medical officers. The Director devotes the whole of his time to the duties of his office, and does not practise his profession outside the hospital; the other assistants, with the exception of the resident medical officers, devote only a part of their time to the hospital, and are allowed private practice. Sixty beds are allotted to each unit, which takes its share of the casualty and emergency work of the hospital. Separate laboratory accommodation is provided close to the wards for pathological research, and the officers of the unit are responsible for making post-mortem examinations on the cases dying under their charge, as well as for the registration of the notes of the patients. The unit is thus self-contained, although it can draw on the resources of, and works in intimate collaboration with, all the other departments. The three main duties which it undertakes to carry out are the care of the patients, research, and teaching. With Prof. F. R. Fraser, who succeeded

Sir Archibald Garrod, F.R.S., in 1920, and Dr. Geoffrey Evans on the medical side and Prof. Geo. E. Gask, C.M.G., D.S.O., as the surgical director, assisted by Mr. T. P. Dunhill, C.M.G. The duties are being conducted in a most satisfactory manner, and although the present arrangement is only for a period of years and is confessedly experimental, there is but little doubt that it will be continued, and that the teaching of clinical medicine and surgery will at last be placed upon a more scientific basis.

THE MEDICAL AND SURGICAL STAFF

The arrangements just described do not affect the constitution of the other four medical and four surgical "firms," which maintain a high standard of teaching on the older system. The medical staff consists of Dr. H. Morley Fletcher, Dr. Drysdale, Sir Percival Horton-Smith Hartley, C.V.O., and Sir Thomas J. Horder, assisted by Dr. Langdon Brown, Dr. Hugh Thursfield, Dr. Hinds Howell, and Dr. A. E. Gow. On the surgical side are Mr. H. J. Waring, C.B.E., Mr. W. McAdam Eccles, Mr. L. Bathe Rawling, and Sir Charles Gordon-Watson, K.B.E., C.M.G., assisted by Mr. Harold Wilson, Mr. Girling Ball, Mr. J. E. H. Roberts, O.B.E., and Mr. R. M. Vick, O.B.E., who at the present time is also Warden of the College.

THE SPECIAL DEPARTMENTS



THE recent history of the hospital coincides with the growth of specialism in the medical profession. Until 1870 the physicians and surgeons undertook to teach and practise every branch of their art except midwifery. About that time it began to be felt that it was impossible for anyone to be equally competent in all departments, and a demand arose in the school for a more thorough and systematic education of the medical student. As late as 1886 it was possible for a student to be placed upon the medical register with hardly any knowledge of surgery if he wished to become a consulting physician, and with a very slight knowledge of medicine if he intended to practise as an operating surgeon. He could become a registered medical practitioner as soon as he had obtained the Licence of the Royal College of Physicians or had been admitted a Member of the Royal College of Surgeons. The first advance was made when the Royal College of Physicians decided that a candidate for the licence must be examined in surgery and the Royal College of Surgeons appointed physicians to examine in the elements of medicine and midwifery. The real advance was made when a conjoint

Board of Examiners was established in 1886 and a double qualification was given on the results of the final examination. The Elizabethan surgeons had striven unsuccessfully and with much bitterness for such a consummation. It passed in the end almost unnoticed and as a thing long overdue.

THE OPHTHALMIC DEPARTMENT

In 1727 Mr. John Freke, who had been elected an assistant surgeon the previous year, was chosen by the governors to take charge of the ophthalmic patients as appears by the following minute: "Through a tender regard for the deplorable state of blind people, the Governors think it proper to appoint Mr. John Freke, one of the Assistant Surgeons of this House, to couch and take care of the diseases of the eyes of such poor persons as shall be thought by him fit for the operation and for no other reward than the six shillings and eightpence for each person so couched as is paid on other operations." Percivall Pott, and after him Sir William Lawrence, devoted especial attention to ophthalmic surgery. But it was not until 1867 that the medical staff asked the governors to provide an ophthalmic department. The request was considered, and two years later a storey was added to the Abernethy block which is situated just behind the church. The ward thus built accommodated twenty-six patients—twelve men, twelve women, and two children—and there

was a small operating theatre. It was opened by the Prince of Wales, afterwards King Edward VII, and was placed in charge of Mr. Henry Power, who was ophthalmic surgeon to St. George's Hospital, and Mr. Bowater J. Vernon, who had been Curator of the Museum at the Royal London Ophthalmic Hospital, Moorfields, and was ophthalmic surgeon at the West London Hospital. The conjunction was a happy one, the two surgeons worked together to make the new department an integral part of the hospital and succeeded in bringing it to a state of high efficiency. They were ably seconded by Miss Davies, "Sister Eyes," who remained attached to the ward during the whole of their tenure of office. Mr. Power resigned in 1894, and Mr. Vernon died in 1901 whilst he was still ophthalmic surgeon. They were succeeded by Mr. W. H. H. Jessop and Mr. T. Holmes Spicer. When Mr. Jessop died in 1917 Mr. Foster Moore, who had done good service during the war as the officer in charge of the ophthalmic centre at Étaples, was elected assistant surgeon. The department kept pace with the advances in ophthalmology and is now suitably housed. The wards remain as they were, but a large out-patient room is provided with a special theatre for the treatment of septic and infective diseases of the eye, whilst much of the drudgery of estimating errors of refraction has been taken away from the ophthalmic surgeons by the appointment of paid assistants to deal with these troublesome cases.

The other special departments were for a time less fortunate. By a rule of the hospital they were placed in charge of an assistant physician or an assistant surgeon chosen in virtue of his position on the staff, and not on account of any special aptitude for the work. These officers taught in inconvenient places and at such times as could be arranged to suit the rest of their work, and it is a remarkable testimony to their general ability that the teaching should have been as good as it was. Sir Lauder Brunton and Sir Henry Butlin brought the laryngological department into high repute; Mr. Willett, Mr. Marsh, and Mr. Walsham made the orthopaedic department famous.

THE THROAT DEPARTMENT

A special department for the treatment of diseases of the throat and nose appears to have existed for some years before its formal recognition in 1878, because Sir Lauder Brunton obtained two months' leave of absence from the governors of the hospital in order that he might go to Vienna to study laryngology. In 1880 Sir Lauder resigned his appointment to inaugurate an electrical department, and Sir Henry Butlin was nominated to act in his stead. At this time the patients were treated on one afternoon in the week in a room between the medical and surgical out-patients room which was often in use until long after the throat patients ought to have been admitted. Butlin, therefore, caused the furniture

of the department, which only consisted of five bull's-eye lamps—each student bringing his own laryngoscope—to be moved into the surgery which was even more inconvenient than the original quarters, but had the advantage of being comparatively unoccupied. Here, with the devoted assistance of Dr. de Havilland Hall, he built up a department which was second to none in London. In 1892 Sir Henry Butlin resigned on becoming full surgeon. His post was taken by Sir Anthony Bowlby, who resigned for a like reason in 1902. He was succeeded by Sir D'Arcy Power, who served for two years and was followed by Mr. Douglas Harmer. After a short interregnum, during which Dr. Jobson Horne and Mr. F. A. Rose were in charge, the laryngological department was completely reorganized as the department for the treatment of diseases of the throat and nose. It was placed under the care of Mr. Harmer and Mr. Rose, who undertook to devote themselves entirely to this branch of work; beds and a small operating theatre in Abernethy ward were allotted to it jointly with the aural department, and it thus became an integral part of the hospital. When the outpatient block was built ample accommodation was arranged for the throat department. Waiting rooms were provided on the second floor, there was an operating theatre with a sterilizing and instrument room, and a dark room for the transillumination of the cranial sinuses. The department therefore has progressed along the lines laid down for it by Brunton and Butlin and has continued to advance with the science it represents.

THE AURAL DEPARTMENT

At a special General Court of Governors held in November 1869, at which the Prince of Wales, afterwards King Edward VII, was present, it was resolved to establish certain special departments in connection with the hospital, and shortly afterwards Sir Thomas Smith was placed in charge of an aural department. He was succeeded in 1873 by Mr. Langton, who resigned his appointment when he was elected full surgeon. In 1882 it was decided, upon the recommendation of the Medical Council, to appoint an "aural surgeon" to take sole charge of the department, and Mr. A. E. Cumberbatch, who had been for many years the senior demonstrator of anatomy, was appointed. Like the other special departments it was grievously handicapped. The allotted floor space would have accommodated comfortably three surgeons and their patients; it had to provide room for seven surgeons and ten patients. Visitors, therefore, were welcomed with a chastened joy as it was almost impossible to show them anything. The patients were examined in the old surgery where, as Mr. Cumberbatch once complained, "hearing tests are handicapped by the re-echoing din of the surgery, babies are screaming in the hollow distance, through the open doors comes the crash and rattle of traffic over the stone setts in Smithfield, whilst in the male 'cross-box' a house surgeon is making urgent efforts to pass a silver catheter through a

seemingly impermeable stricture to a running accompaniment of groans and interjections from the patient." In spite of these drawbacks Mr. Cumberbatch, with the able assistance of Mr. Laurie Lawrence, managed to teach the rudiments of aural surgery to many generations of students. They were succeeded in 1907 by Mr. C. E. West, who resigned in 1921, and was followed by Mr. Sydney Scott and Mr. T. H. Just. The department was reorganized under Mr. West and, as has already been stated, it shares the accommodation provided for the throat and nose department both in Abernethy ward and in the new out-patient block. About two thousand patients are treated annually, and upwards of one hundred and fifty mastoid operations are performed.

THE DERMATOLOGICAL DEPARTMENT

The department for the treatment of the skin was established about 1867, when Dr. James Andrew and Dr. Reginald Southey were appointed demonstrators of the subject, although there was no special clinic. The demonstrators merely used such material as presented itself in the ordinary course of their practice in the out-patient room. Special times were set apart in 1870, and Dr. Gee was placed in charge of the department. He was succeeded by Sir Dyce Duckworth, who continued to act until he was appointed full physician in 1875, when his place was taken by Mr. Morrantly Baker, who served until 1881. Mr. Baker became well known

as a dermatologist, and made many contributions to the literature of the subject. The skin cases were seen at this time on one afternoon in the week in a small room next the dispensary at the women's end of the surgery, a room which served also for the aural and laryngological departments. Clinical assistants were not recognized officially, but Dr. J. H. Stowers worked constantly in this capacity, and Dr. Thin did much of the microscopical work. When Mr. Baker resigned on his appointment as full surgeon, Dr. Wickham Legg replaced him from 1882 to 1884; Mr. W. Harrison Cripps from 1885 to 1891; Dr. Samuel West from 1892 to 1898; and Dr. Ormerod from that time until the department was reorganized by the appointment of Dr. H. G. Adamson in 1907 with a staff of two chief assistants, two clinical assistants, and a house surgeon. It is now housed on the top floor of the outpatient block in order to obtain plenty of light. There is an average yearly attendance of 2,500 new patients, and about 10,000 visits are paid by old patients. The system of instruction adopted is to show the students a large number of cases to enable them to make a diagnosis by direct observation.

THE ORTHOPAEDIC DEPARTMENT

Mr. Alfred Willett was invited to take charge of an orthopaedic department in 1870 at a time when considerable attention was being directed to the subject as a result of the

introduction of Sayre's plaster jacket in the treatment of spinal caries. Mr. Willett continued in charge of the department until 1880 when he was succeeded by Mr. Howard Marsh, who was followed in 1884 by Mr. W. J. Walsham, and he, in turn, by Mr. W. Bruce Clarke, who was succeeded in 1903 by Mr. W. McAdam Eccles. This long line of distinguished surgeons, who were thoroughly interested in orthopaedic surgery, had brought the department to a state of very high efficiency which was maintained when it was reorganized and combined with a department of massage and physical exercise, placed under the care of Mr. R. C. Elmslie, O.B.E. The department is now allotted seven beds and two cots in the surgical wards of the hospital. It is staffed by an orthopaedic surgeon with a chief assistant, two or three clinical assistants, and a varying number of dressers. The weekly attendance of patients is from eighty to one hundred.

The massage and physical exercise department, which is associated with the orthopaedic department, works at present in the waiting hall of the medical out-patients, where it is carried on with the help of a sister, a nurse, eight half-time qualified masseuses, and a teacher with ten to twenty female pupils from Mrs. A. J. Wilson's school of massage. The total number of out-patients in 1921 was 1,448; many in-patients and pensioners were also treated.

THE ELECTRICAL DEPARTMENT

An electrical machine was bought for the use of the patients in 1777, and in 1818 Mr. Latchford reported that it was quite unfit for further use. He proposed to make a new machine upon the modern principle with a plate two feet in diameter and all the apparatus and case complete to the satisfaction of the medical officers for a sum not exceeding £17 18s. "It was ordered that the machine be placed under the care of Mr. Latchford and that it be not taken out of the hospital. He was further directed to attend and electrify all the patients denoted by the medical officers to undergo the operation upon the following terms: if the operations within the hospital do not exceed thirty at 2s. each and if above that number 1s. each." He appears to have held office until 1838 when he asked to be paid by a salary instead of by the case. In November 1843 Mrs. Woodstock's bequest of £200 consols to the Electrical Institution in Bunhill Row was made over to the hospital by the executor of her will as the institution had been dissolved during her lifetime.

The real history of the electrical department, however, does not begin until it was resolved on 21st June 1878 that an electrician should be appointed to have charge of the electrical apparatus, to administer electricity, and to use the electric cautery for operations. The old admission room opposite the church, which had been used latterly for a

coroner's court, was set aside for his use. The governors were fortunate in securing the services of Dr. W. E. Steavenson, who was appointed electrician in 1882, and continued in office until his death in 1891. Dr. Steavenson was succeeded by Dr. H. Lewis Jones, a man of equally high character, who resigned on account of ill-health in 1912. These two physicians created a tradition which has elevated medical electricity in England from scientific empiricism to its present position as a recognized branch of medicine. The tradition has been carried on by Dr. Hugh Walsham and Mr. E. P. Cumberbatch. It is said that diathermy, ionization, treatment by sinusoidal currents, and the "condenser method" of testing reactions were first practised in England in the electrical department of this hospital. When Dr. Lewis Jones took command the apparatus consisted of three element boards connected with sixty Leclanché cells in the basement, an electrical bath, a Carré's static machine, an operating table for electrolysis, and that was all. He left a splendid and completely fitted electrical and X-ray department, and by his book on Medical Electricity had fairly earned, in his too short life, the title of "the Father of Medical Electricity."

THE X-RAY DEPARTMENT

The X-ray department was at first an annexe of the electrical department, but it has now shaken off its allegiance and is independent, taking up much room but rendering great help both in diagnosis and treatment. The discovery of X-rays was announced by Roentgen in 1895. In 1896, after hearing a letter from Dr. Lewis Jones "the Governors resolved that a set of electrical apparatus be provided at an estimated cost of £15, in addition to which there will be necessary occasional renewals of the tubes (£1 apiece), photographic plates, and chemicals, and the fitting-up of a dark room or cupboard for the use of the cryptoscope." From these small beginnings, at first under the charge of Dr. Hugh Walsham and at present of Dr. N. S. Finzi, it now occupies the space devoted to the orthopaedic and massage departments as well as the two large rooms which were originally allotted to it. The staff consists of the medical officer in charge, a senior and junior medical officer, two chief assistants, one of whom acts as registrar, and clinical assistants, whilst the physicist to the hospital gives much valuable help. There is also a technical assistant, a photographic assistant, and a lay assistant who has the care of the apparatus used in the treatment of patients.

THE ANAESTHETIC DEPARTMENT

No department has undergone greater expansion than that which undertakes the administration of anaesthetics. Saturday afternoon formerly sufficed for the performance of operations in the theatre. It was thought to be a considerable advance when Wednesday afternoon was set aside for the same purpose, and the surgeons grumbled at having to attend in the theatre for the purpose of watching their colleagues operate. The natural result was that their attendance gradually diminished until it ceased altogether, unless something unusual was expected. Minor operations were generally performed in the wards and often without any anaesthetic, screens being placed round the bed.

Robert Liston performed the first amputation under an anaesthetic in London, the patient being under the influence of ether, at University College Hospital, on 21st December 1846. On 10th November 1847 Sir James Y. Simpson communicated a paper on the use of chloroform to the Medico-Chirurgical Society at Edinburgh stating that he had performed three operations and had only used half an ounce of the drug. The paper must have attracted immediate attention at the hospital for three ounces of chloroform were bought of Messrs. Heathfield at two shillings an ounce on 27th November following; and it must be remembered that communication between London and Edinburgh was by coach. But it was

not until 1852 that Dr. Patrick Black was appointed the first administrator of anaesthetics at our hospital. He was followed by Dr. Robert Martin four years later, and both these gentlemen were afterwards elected assistant and full physicians to the hospital. They were succeeded by Dr. Batten, who became a consulting physician at Gloucester, by Mr. Langton and Mr. Howard Marsh who, in due course, were assistant surgeons, surgeons, consulting surgeons, and, in the case of Mr. Marsh, Professor of Surgery at the University of Cambridge. The appointments were little more than nominal, the anaesthetist attended for capital operations only, the greater part of the work being performed by any house physician, house surgeon, or ophthalmic house surgeon who could be found disengaged at the moment. In 1875 Mr. Joseph Mills was appointed with a charge that he should give his whole time to anaesthetics, though he was allowed to give them in private. The choice was admirable. Mills had all the qualifications needed to make the new department successful. Of suitable age and pleasant manners, skilled in his work, a good organizer, a first-rate teacher, a man of few words, punctual to the moment, absolutely unperturbed even in the most trying circumstances, and never wearied, he soon raised the administration of anaesthetics to a fine art, and left a tradition which has placed the department foremost amongst those of the hospital. Mills acquired a large practice as a professional anaesthetist but died of phthisis in 1893. He was succeeded by Mr. Richard Gill, who was elected a Governor of the hospital when he resigned his office

in 1916 after he had brought the department well abreast of the times. It is now in charge of Mr. W. Foster Cross and Mr. H. E. G. Boyle, O.B.E., with the assistance of Dr. Hadfield, M.B.E., Mr. Wade, and Dr. C. Langton Hewer.

One of the first acts of Mr. Joseph Mills on his appointment was to begin a register of the patients to whom anaesthetics were administered in the hospital. In 1875 the number was 1,587; in 1921 it was 12,000. In 1875 there were operations twice a week in the operating theatre, once a week in the ophthalmic wards, and occasionally in Martha; arrangements now have to be made to give anaesthetics thirty-eight times a week in the various operating theatres in addition to the emergency cases and the work in the wards.

DEPARTMENT FOR THE DISEASES OF CHILDREN

In the latter part of 1904 it was decided to establish a department for instruction in the diseases peculiar to childhood, more especially for the treatment of nutritional disorders. It was placed in charge of Sir Archibald Garrod, F.R.S., and Dr. H. Morley Fletcher, both of whom had been attached for many years to hospitals for children, with the assistance of a chief and a clinical assistant. When Sir Archibald Garrod resigned, his place was taken by Dr. Hugh

Thursfield, and in 1920 Miss Banks was appointed a lady almoner to look after the interests of the children who had been in-patients or had attended the hospital as out-patients. No wards are reserved exclusively for children, but cots are allotted to their use in the general medical and surgical wards.

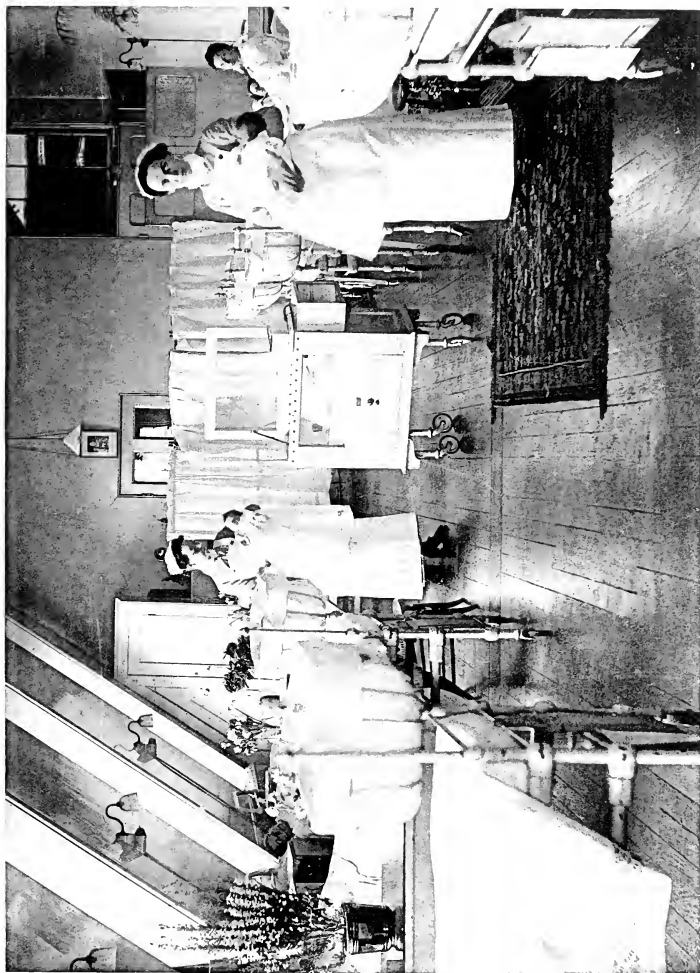
THE OBSTETRICAL DEPARTMENT

It has already been explained that the hospital made no special provision for the treatment of the diseases of women until about half a century ago, although the medical school had long taught this important subject to the students, and the original foundation of the hospital as laid down by Rahere provided for lying-in women. In 1825 the House Committee passed the following resolution: "To secure to the pupils the benefit of instruction in midwifery in the event of there not being any member of the medical board educated in that science and competent to teach it. In such contingency the Committee recommend that an election for the Midwifery lectureship do take place at the usual Court for the election of officers in every year until the necessity for strengthening the medical school by the talents of strangers shall no longer be necessary by the hospital possessing within itself the competent knowledge and excellence in that branch of the profession as it so eminently is allowed to do in every other."

Dr. Conquest, Dr. Ashburner, and Dr. Ley were appointed in succession, followed by Dr. Rigby in 1837 and Dr. Charles West in 1848. Dr. West was succeeded by Dr. Greenhalgh, and in 1877 Dr. Matthews Duncan came from Edinburgh and at once raised the teaching of midwifery to the highest level. Martha ward had been placed in charge of the physician accoucheur as early as 1861, and Dr. Matthews Duncan was able therefore to have command of beds at once, whilst Dr. Clement Godson acted as physician-accoucheur in charge of out-patients. Dr. Duncan died whilst still holding office in 1890, and was succeeded by Sir Francis Champneys and Dr. W. S. A. Griffith.

From 1880 onwards gynaecology was developing as a branch of obstetrics distinct from midwifery. For some years the operations in Martha ward were entrusted to the surgeons of the hospital, Mr. W. Harrison Cripps and Mr. W. Bruce Clarke holding office for the longest periods of time. The present Martha theatre was built at the expense of Mr. and Mrs. Harrison Cripps as a model of what a modern operating theatre should be and in it much good work is done. Sir Francis Champneys continued to act as physician accoucheur whilst Dr. Griffith undertook the gynaecology. They were succeeded by Dr. Herbert Williamson and Dr. J. D. Barris, but not until the department had undergone considerable reorganization in 1910, when Elizabeth ward (plate 31) was converted into a lying-in ward and a part of the hospital thus reverted, after an interval of several hundred years, to one of its original purposes.

ELIZABETH WARD
1922



DEPARTMENT FOR VENEREAL DISEASE

A department for venereal disease has been opened at a special treatment centre situated about half a mile away from the hospital, in Golden Lane, close to the church of St. Giles, Cripplegate, which was built by Alfune, the friend of Rahere and our first almoner. The department is called "The Shelter," and consists of out-patient rooms and beds for ten in-patients. It is under the care of Mr. Kenneth M. Walker, with an assistant medical officer, Dr. A. C. Roxburgh, a chief assistant, and a house surgeon, who also acts in a similar capacity for the skin department.

DEPARTMENT OF PSYCHOLOGICAL
MEDICINE

The department of psychological medicine is under the charge of Sir Robert Armstrong-Jones as lecturer on the subject, and Dr. Porter Phillips as physician to out-patients. The object of the department is to teach students the important subject of mental and nervous diseases, the latter in their relation to mental abnormalities such as the various neuroses and the psychoses which are on the borderland of certifiable insanity. The clinical instruction is given at the

London County Council's Mental Hospital at Claybury. In 1919 the governors of the hospital opened an out-patient department for cases of incipient mental breakdown. Here psychological examinations of new patients are carried out and recommendations are given as to treatment whilst an attempt is made to remedy the underlying physical causes of mental disease.

DEPARTMENT OF FORENSIC MEDICINE

The department of forensic medicine has been completely reorganized during the current year, and is now placed in charge of Sir Bernard H. Spilsbury, whose energy and unrivalled experience will very shortly enable it to compete in excellence with the other special departments.

THE DENTAL DEPARTMENT

The dental department was reorganized in 1836 when the House Committee asked the medical officers to place it on a better footing than it had been heretofore. The physicians and surgeons considered the request and replied: "We have deliberated upon the subject, and bearing in mind that the mode of growth of the Teeth and the principles of their development form part of the General Education, we submit

as our opinion that all that is required of the Dentist at this Hospital is to draw teeth, and we submit as the best means of relieving the wants of the public in this respect that the House Surgeons, who are always on the spot, should be instructed to consider this as part of their duty." The House Committee, however, pressed the matter, and Arnold Rogers, a former pupil of the hospital who had been admitted a Member of the Royal College of Surgeons in 1830, was duly appointed as Dentist. He was instructed to attend once a week at a stated hour and on other occasions when required to do so. He was also to see patients at his own house and to give instruction in dentistry, but he was not to curtail or infringe the existing privileges of the house surgeons and students. Rogers performed his duties so well and was held in such respect that he was elected a Fellow of the Royal College of Surgeons of England in 1853, and on his retirement was appointed consulting Surgeon Dentist to the hospital. He was succeeded by Samuel John Tracy, M.R.C.S.Eng. When a Lectureship of Dental Surgery was instituted in 1866 Alfred Coleman was appointed and was elected dental surgeon to the hospital in 1867. Coleman was succeeded by Mr. F. Ewbank and Mr. W. B. Paterson, F.R.C.S.Eng., with J. Ackery and A. S. Mackrell as assistants. Mr. R. C. Ackland, C.B.E., Mr. H. G. Read, Dr. Harold Austen, Mr. F. Coleman, and Mr. J. G. Atkinson Fairbank have since held office.

D'A. P.

THE DISPENSARY AND PHARMACEUTICAL DEPARTMENT

As already stated on page 51, the earliest record of a department for the preparation of galenicals within the hospital is in 1614 when, on the appointment of Mr. Humphry Croxton as apothecary, the governors reported that :

“ according to an order of the 22d day of January last as concerning oyntments salves phisicke ministered to the poore of this hospital, that they, upon consyderation had thincke it fytt and necessary for the more better curings of the poore, that all the oyntments, salves and phisicke applied to and for the helpe and cure of the said poore be made in some convenient place within this hospital whearby the poore may the rather and the better be provyded of those necessities.

“ It is therefore ordered that Humphry Croxton, Apothecary, be placed in such rooms for the supplying of the same offices as Mr. Treasurer and other of the Governors shall thincke meate.”

Previous to this various drug houses supplied the necessary medicines, and in still earlier years the physicians and surgeons brought with them the remedies for their patients.

This new department was called “ the Apothecary's shop,”

and to this day, although there has been no apothecary since 1868, the dispensary is so named on the out-patients' cards.

Tobias Jeffs, the first Head Dispenser, was appointed in 1868, on the retirement of Frederick Wood, the last of the apothecaries. The "shop" was rebuilt in 1742 and, with various alterations, remained until April 1906, when it was demolished in order that the site might be utilized for the more efficient building which we have at present. During this rebuilding the old Mathematical School in Christ's Hospital was fitted as a temporary dispensary and served until the new dispensary was occupied on 21st October 1907.

The patients, having been seen in the surgery or in the special departments, come to the dispensary waiting hall, which has a capacity for 250, and there take their turns at one of the eight windows which pierce the wall between dispensary and waiting hall. Above these windows are lettered signs. The names, starting from the entrance, are:

Urgent cases.	Men.
Women.	Diseases of the eye.
Diseases of children.	Diseases of the throat.
Diseases of women.	Diseases of the skin.

To the appropriate windows the patients take their prescriptions with suitable containers, but if they have not bottles or pots these may be obtained at a kiosk in the waiting hall.

The average weekly number of prescriptions is 5,500, but on many occasions as many as 1,300 have been dispensed in a day.

The dispensary is seventy-five feet long by twenty-four feet wide. It is lofty and, as part of it projects from the main building, a good top light is obtained, none of which is absorbed by the white surface of the tiled walls.

Long mahogany-topped counters, made up of various fittings from the old dispensary, and probably more than a century old, run down each side of the dispensary. These are fitted with drawers and cupboards. In the long counter by the patients' window are drawers containing labelled boxes of pills or tablets, for plasters, corks, boxes, and labels, so arranged as to enable the dispensers to turn out the maximum of work in the minimum of time. Pill boxes are delivered ready labelled from an automatic contrivance made of glass tubes. The labels are as distinctive as possible; those for gargles, lotions, liniments, and mixtures being of different colours. Children's labels are printed in red ink and adults' in black, so that the danger of using "tablespoonful" (adult's dose) for "teaspoonful" is minimized.

In the centre of the dispensary, and occupying almost the entire length of the hall, are three slate-topped tables upon which stand glass carboys containing the mixtures of the hospital: *Haustus Menthae Sulphuricus* \bar{c} *Magnesii Sulphate* or, as it is more generally spoken of, *H.M.S.* \bar{c} *M.S.*, has the place of honour which it deserves, for the identical mixture has done good service since 1838. Two other preparations of the same year still survive in *Pil. Cal.* \bar{c} *Col.*, and *Pil. Hyd.* \bar{c} *Cret. Co.* Above the carboys are shelves containing solu-

tions of salts, tinctures, etc. Pewter-lined troughs catch the drips from the carboys.

The ointment cupboards are at the end of the dispensary. Each is closed, but the doors open downwards to form a ledge for the ointment jar to rest upon. Above the ointment cupboards are shelves for syrup bottles, the poisonous syrups being placed together, labelled distinctly and fitted with danger caps. The counter opposite the patients' side is in three parts, being intersected by steam-heated radiators, but slabs of slate are placed over the radiators, with the result that there is one continuous surface, the slate forming excellent hot slabs.

Another useful innovation is seen in the shelves, which are not placed, as is customary, flush against the walls, but some six inches away, with a rail two inches wide in place of a back. The shelves are thus easier to dust, and the tiling behind makes the appearance considerably brighter. A huge leech aquarium is kept on this counter. About 400 a year are now used, whereas in 1821 the number was 24,700 (see also page 52). All ointments for use in the wards are put into triangular turquoise coloured pots, and the lotions, liniments, etc., into triangular bottles. The special gallipots and phials were instituted in 1836. In the poison cupboard the bottles are of a distinctive colour, with protective danger caps, and with red, diamond-shaped poison labels. The shelves are made just wide enough to accommodate a single row of these bottles. A bell rings whilst the cupboard is open, the dispenser thus being reminded that he is handling poison.

The manufacturing laboratory is in the basement, but it is well lighted and perfectly dry, thanks to a fine concrete floor. The laboratory has many special fittings, such as the percolators which are of copper lined with tin. Adjoining these is a steam drying-chest for granulated preparations. A steam distilling and condensing plant occupies a corner, and supplies a hundred gallons a day. A Bird's alcohol recovery apparatus and a Bramah press are in use so that no alcohol is wasted in making tinctures. A battery of steam pans and an edge-runner mill occupy one side. Two of the steam pans, each with a capacity of ten gallons, are fitted with a mechanical tilting apparatus and two others with a mechanical stirrer for making such preparations as "Boroglyceride" and Confection of Senna. Opposite the mill is a machine for sifting powdered drugs into varying degrees of comminution. Three others of 60-, 80-, and 120-gallon capacity, with suspended and counterpoised covers, are used for general purposes, such as the evaporation of liquors in making extracts, and in the preparation of decoctions. A large steam pan of 200-gallons capacity gives a plentiful supply of hot distilled water for this purpose. Water is supplied to all these pans by taps fitted upon swing arms which lie close to the wall when not in use. Large quantities of drugs, purchased by contract, a system which commenced in 1836, are kept in stock in bins. Along the centre is an ointment mill. Two large marble mortars with special pestles are used for pulverizing certain drugs and for making mixtures, etc. A fine bell-metal mortar of ancient

date is found useful for powdering small quantities of very tough roots. An "Express" rotary machine illustrates the art of tablet making. An emulsifying machine and hand-emulsifiers on the churn principle, and aerated-water machinery are also in the laboratory. A fume cupboard, and an autoclave for the sterilization of physiological fluids for injection complete the outfit.

Two stores are entered from the laboratory. In the spirit and oil store are steel containers heavily lined with tin, fitted with glass gauges and taps with lock and key. The containers for sixty per cent. alcohol, olive oil, and cod-liver oil hold 200 gallons. Spt. Vini rect. and methylated spirit are stored in 100-gallon vessels, while there are smaller containers for industrial methylated spirit and brandy. Pipes of port wine are kept on special tilting apparatus. Wines were first given out from the apothecary's shop in 1699. The other store-room contains the spare stock of galenicals, drugs, and proprietary and synthetic remedies. The stock jars are closed by bungs with stout brass rings, by which they can be easily removed.

The following figures give some idea of the quantities of drugs used in a year: Boric acid, 52 cwt.; bismuth carbonate, 3 cwt.; glycerine, 2 tons; ferri et ammon. cit., $4\frac{1}{2}$ cwt.; gentian root, 4 cwt.; soft paraffin, 21 cwt.; rhubarb root, $4\frac{1}{2}$ cwt.; potassium iodide, 600 lb; senega rhizome, 4 cwt.; sodium bicarbonate, 17 cwt.; magnesium sulphate, $2\frac{1}{2}$ tons.

J. L. M.

THE PATHOLOGICAL INSTITUTE

The pathological department of the hospital, as a separate organization, has a history of not more than thirty years. This statement is not meant to imply that pathology was not studied and taught there before this. On the contrary, we know that post-mortem examinations were carried out more than two centuries ago, and that the museum was founded in 1726. But during the last quarter of the nineteenth century the study of disease, which previously had been mainly clinical, underwent a remarkable expansion in several directions. The microscope came to be far more widely used, involving new and improved methods of section-cutting and staining; chemical examination of the various fluids of the body was shown to yield important evidence in diagnosis; the histology of the blood was founded by the researches of Ehrlich; the relation of microbes to disease assumed increasing importance, as, one by one, infective processes were traced to their primary causes. And as the study of pathology became wider and more varied, its value to the clinician became increasingly apparent. It had been, not indeed a side issue, but an appendage of medicine and surgery, pursued and taught by the physician and surgeon when not engaged in their clinical avocations. How well this could be done was exemplified at St. Bartholomew's in the life and work of Sir James Paget, whose greatness as a

pathologist looms all the larger in the indistinct light of the scientific knowledge of his day. We are tempted to wonder how marvellous an influence might have been exerted by a man of Paget's insight and genius had he possessed the opportunities for research which lie in our hands to-day.

At the present day pathology has acquired a position and a significance widely different from that which it possessed when it implied little more than morbid anatomy and histology. It now implies the study of disease-processes from any and every aspect: it has become the very basis upon which medicine and surgery rest—an integral part of them, and no longer an appendage. It is now not merely a study in itself, but a group of studies so extensive that it is no longer possible for any one man to be proficient in the whole. This change has been reflected in the attitude of the hospital and of the medical school.

Up to the year 1893 pathology was taught and practised by clinicians, but the time had come when those engaged in medical and surgical practice could no longer keep themselves fully abreast of the advances in pathological knowledge. It so happened that there was then present at St. Bartholomew's Hospital a man, well known as a rising pathologist, and anxious to make this his life's work—Dr. A. A. Kanthack. He was offered the posts of Lecturer on Pathology and Pathologist to the Hospital. St. Bartholomew's was the first hospital in London to secure the services of a pathologist by profession, and it was singularly fortunate in its choice. Kanthack was a man of immense ability and enthusiasm,

with the gift of inspiring enthusiasm in others, and he was an indefatigably hard worker. In the laboratory provided, which was no more than one end of the physiological laboratory cut off by sliding doors and previously used for section cutting work only, he set himself to organize the study of pathology, gathering round him a small band of willing workers. He was well acquainted with modern methods and was a good bacteriologist. The application of this new knowledge to the service of medicine and surgery was his guiding idea, and he founded, at St. Bartholomew's Hospital, the study of clinical pathology. He was a first-rate teacher, and his lectures proved so novel and instructive that they attracted large audiences. He was practically the first to lecture on what we now term "general pathology," though Paget, Savory, and others had dealt to some extent with the subject in their lectures on surgery. It is not too much to say that Kanthack laid the foundations of the Pathological Department so well that his successor had little to do but follow the same lines and meet the new demands which continually arose as fresh methods were introduced. It was unfortunately only for some four years that the hospital retained Kanthack's services. He could not resist the appeal of the wider sphere offered him by a professorship at Cambridge. In 1897, when he left, Dr. F. W. Andrewes became his successor and endeavoured to live up to the high standard which had been set.

The pathological laboratory, in those days, was an inconvenient apartment, never planned for the work necessary in

complex modern scientific investigations. Such small improvements as could be made were gradually carried out, but the idea of spending any large amount of money on the department did not find much favour. A salary of £100 per annum was deemed sufficient for the pathologist in 1893, and Dr. Drysdale, as demonstrator, at first gave gratuitous service. When Dr. Andrewes was appointed the salary was slightly increased and such private pathological practice as presented itself was allowed. Grants were made from time to time for necessary apparatus, but the running costs for upkeep of the department hardly exceeded £100 a year. Nevertheless, the work and teaching at that time required were carried out. In addition to the services of Dr. Drysdale as demonstrator, now paid a small stipend, first one and then two assistant demonstrators were appointed. There was never any difficulty in securing men to serve in these offices, for the value to the individual of a pathological training was very apparent. Several members of the present medical and surgical staff of the hospital have thus passed through the pathological department in the course of the past twenty-five years, and would be the first to acknowledge the benefit that they received.

The history of the department during this period of a quarter of a century is one of steady growth in response to the increasing demands made upon it. It was a period of rapid development in the application of laboratory methods to clinical problems. It may suffice to remind the reader that during these years it became a common practice to remove

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portions of tissue from living patients for purposes of histological diagnosis. Enlarged glands, or pieces of the edge of a suspicious ulcer are thus frequently examined. More than this, it has been found possible to prepare sections of tissue sufficiently good for rough diagnosis in the course of a few minutes, so that the surgeon can be furnished with at least some idea of the nature of a tumour during the actual course of an operation. Puncture of the spinal theca and the withdrawal of cerebro-spinal fluid for chemical, cytological, or bacteriological diagnosis has become a routine practice in suitable cases. Blood cultures have come into general vogue, and are now carried out with efficiency by the removal of five or ten cc. of blood from a vein, instead of with a few drops from the finger. No branch of pathology has shown more astonishing progress during these years than bacteriology, especially on its serological side. The agglutination reactions of the serum, as now carried out by the macroscopic method, have gained greatly in accuracy, and hence in diagnostic value. The technique of complement fixation and its application to the diagnosis of syphilis by the Wassermann test has arisen within the last fifteen years, and to-day we see the new "sigma test" devised by Dreyer threatening to supplant the Wassermann reaction. The whole practice of vaccine therapy has arisen also during these years: its uses and limitations have had to be defined by practical experience, and its prophylactic value determined. In chemical pathology the changes have been equally striking. The chemical examination of the various fluids and secretions of the body,

by tests, qualitative and quantitative, undreamed of twenty-five years ago, has been, and still is, advancing rapidly. In particular, methods have been devised by which sufficiently accurate chemical tests can be applied to small volumes, even to a single drop, of the blood. Such a sketch as this, even though it is a mere outline of some of the more salient points in progress, will give an idea of the volume of work thrown upon the pathological department. Each new test, each new refinement in technique, each new application of laboratory methods to clinical practice, has first to be mastered, then to be applied, and finally to be appraised, in the light of experience, at its true value. A method may be introduced and hailed as a great advance, yet may fail to stand the test of practical experience. It is of immense advantage that in all such questions the clinician and the pathologist should be in intimate contact, and nowhere can so close an intimacy be maintained as in a great hospital. This truth has ever been kept in mind at St. Bartholomew's, to the profit alike of the clinician, the pathologist, and the patient.

It will readily be believed that a pathological staff and laboratory which seemed adequate five and twenty years ago became, in a few years, altogether incapable of meeting the growing demands made upon it. A great expansion was urgently needful, and the need had to be met by the erection of a new building for the accommodation of the department and by a considerable expansion of its staff. The plans for the new building were carefully considered, with a view not only to present, but to future, needs. And it is well that this

was so, for the accommodation, which seemed almost excessive in 1909 when the building was opened, is to-day in use to its full capacity, and the time may well come when it may prove insufficient.

The new department, which cost some £30,000 to erect and equip, stands just inside King Henry VIII's gate, overlooking Smithfield. It is a handsome stone structure, fire-proof in construction, of five stories and a basement. It has its own entrance, and on the top floor it communicates with the old school buildings by a bridge connecting it with the museum. The ground floor is devoted to college offices: the remainder of the building, with the exception of a pharmacological laboratory, is entirely devoted to pathology. On the first floor are the professor's laboratory and private room, separate laboratories for the professor of morbid anatomy and histology, and for each of two demonstrators, together with a large laboratory devoted to clinical pathology. On this floor also are rooms for the reception of material for investigation from the wards, for cleaning and for the preparation of culture media. The second floor is occupied by the laboratory of the lecturer on bacteriology, by a laboratory for the three assistant demonstrators, and by two large laboratories, one of which is devoted to bacteriology and one to research work. The third floor is occupied by the lecturer on chemical pathology, who has a private laboratory, a balance room, and a store-room in addition to the large laboratory which fills almost the whole length of the block. On this floor also is a large room for the pathological library,

named after Prof. Kanthack. On the fourth floor is the large and well-lighted post-mortem room, with its six tables and admirable ventilation. Off this is a laboratory at present used for immediate examination of material from the autopsies. The direct access to the museum by the bridge from this floor is of great convenience. This floor contains also, besides the pharmacological laboratory, rooms for the accommodation of the animals needed for inoculation and experimental work.

The building is served by an electric passenger lift, and by a second special lift for bringing bodies to the post-mortem lift from the cold storage chambers in the basement. In the basement, too, is a special cold storage chamber for the preservation of material and reagents of a perishable nature, together with storerooms for apparatus.

The staff of the pathological department was increased, when the new building was opened, by the addition of an assistant pathologist and a demonstrator of chemical pathology, while the number of junior demonstrators was increased. During the years which have elapsed since then, still others have been added to the staff, which now numbers ten, not counting the curator of the museum. Some of these are officers of the hospital, others of the medical college, while some receive emoluments from both sources. The offices are as follows: (1) The Pathologist to the Hospital, who has been given the status of Professor of Pathology in the University of London. He is the responsible director of the department, lectures on general pathology, and acts as general consultant to those under him and to the hospital staff. He

is now relieved of routine teaching and pathological work; (2) the Assistant Pathologist has had his title changed to that of Bacteriologist to the Hospital and Lecturer on Bacteriology; (3) a Lecturer on Morbid Anatomy and Histology has been recently created. His duties comprise the supervision of all post-mortem examinations and lecturing on the subjects named; (4) the Demonstrator of Chemical Pathology has now received the titles of Chemical Pathologist to the Hospital and Lecturer on Chemical Pathology; (5) three full Demonstrators hold office in the department, being men who are devoting themselves exclusively to pathology; (6) three Junior Demonstrators are also attached. They hold office for two years only, and the posts are half-time ones, designed to afford the opportunity of a pathological training to those who are intending later to pursue clinical work.

This list does not include all who take part in the work of the department. The routine clinical pathology of the wards is performed by students holding the post of "pathological clerks," under the supervision of the chief assistants to the members of the medical and surgical staff of the hospital. The chief assistants also perform the post-mortem examinations under the guidance of the lecturer on morbid anatomy and histology. Again, the pathologist to the venereal department carries out his work in the pathological department.

The responsible post of curator of the museum, for many years held by the pathologist with the help of a junior curator, has now been made a separate office.

It may be added that a staff of ten or twelve laboratory attendants is required to minister to the scientific workers, and there are in addition three museum attendants.

The medical and surgical professorial units have their own pathological laboratories, but between these and the pathological department there is constant and close intercourse. A sum of £10,000 has recently been received by the hospital as a gift from Sir William Dunn's trustees, for the provision and upkeep of the laboratories of these units.

The Work of the Pathological Department.

Before referring to this in detail two points must be made clear. The first concerns the relation between the hospital and the medical college. It is plain that, in a great hospital with a medical school attached, the pathological work which is performed for the hospital serves also for teaching purposes. No good end could be served by any attempt to separate the work, indeed, the arrangement which combines the two objects in a common building with a common staff is the most economical that can be devised. The total annual cost of the department may be put, at the present time, at some £8,000—and this is borne jointly by the hospital and the college, the former paying rather more than a half share. The second point concerns the relation between the different branches of pathology within the department. It has been pointed out that there are now separate lecturers on general pathology, on morbid anatomy and histology, on bacteriology, and on chemical pathology. At some medical schools

there exist separate *departments* of these subjects, between which there is, in some cases, little of that close connection which should subsist between parts of a single subject. At St. Bartholomew's it has always been the tradition that pathology should be treated as an organic whole, and not divided up into watertight compartments—a tradition which the housing of this whole in a single building makes it easy to keep up. One worker may devote himself especially to the subject in which he is most interested, or in which he happens to excel, but his attention is not exclusively directed to this, and the results of his work are freely communicated to others, while the application of all pathological investigations to clinical problems is fostered by the free access to the wards which all the workers enjoy. The demonstrators do not specialize in any one branch of pathology, but practise and teach all. It may be that the increasing field covered by pathology will necessitate a higher degree of specialization, indeed, the appointment of separate lecturers is a step in this direction. But from the point of view of the student any such separation of the different branches of the subject cannot but prove a loss, since it must lead to a lack of appreciation of that broad view of disease which is so essential in training.

Passing now to a brief sketch of the work which is carried on in the pathological department at the present day, it may be considered under the three headings of clinical pathology, teaching, and research. If we except such minor investigations as routine urine testing and similar simple things which

can easily be carried out in the wards, all the clinical pathology from the wards and out-patient departments is done in the pathological block. The work of the professorial units, as has been said, is done in their own laboratories. The physician or surgeon who desires any investigation on a particular case signs a request on a special card and sends it to the department which is responsible for collecting the requisite material, and making a report upon it when the result is obtained. The work is distributed in accordance with its nature and difficulty. The easier investigations, constituting most of the routine work from the wards, are carried out by the pathological clerks, under the supervision of the chief assistants. The post of pathological clerk is one held, for three months, by a student, just as he would hold a clinical clerkship or dressership in the wards. Each member of the visiting staff has two or three pathological clerks at a time, and the post not only enables the student to acquire proficiency in such methods of pathological technique as he may require to practise for himself in after life, but also allows him to apprehend the importance of the investigations he has made for the cases in the wards to which he is attached. More difficult tasks are assigned to the junior demonstrators, while those presenting the greatest difficulty are allotted to the full demonstrators. Chemical problems are given naturally to the chemical pathologist and his assistants. All the workers know that, when they are in doubt, they can fall back on their seniors for help or advice, and such problems frequently come through to the professor and lecturers. Again, the members

of the visiting staff not rarely invite the latter to consult in the wards over a difficult case.

It will be understood that in a hospital having so many beds as St. Bartholomew's, the number of pathological investigations demanded is a very large one. It is difficult to name an exact figure, but 8,000 to 10,000 examinations per annum would probably not be an excessive estimate.

Teaching.

Side by side with the work above-named, and partly overlapping it, is the teaching of pathology in the medical college. The different lecturers teach partly in the theatres of the college buildings, partly in the pathological department, as is most convenient. Practical classes are held chiefly in the latter building. These lectures and classes are numerous—some may think too numerous—but at least every student is given the opportunity of learning the nature of disease from every aspect, and this in a practical way, while special stress is laid on the connection of pathology with clinical work. This is not the place for a detailed account of all the teaching classes, which are fully set forth in the annual handbook of the college. Mention must not be omitted, however, of the important place held by the pathological museum in the study of pathology at St. Bartholomew's. This collection, one of the largest and best in the country, furnishes ample material for lectures and demonstrations, while students are encouraged to work there, bringing their text-books to study in the light of the pathological specimens themselves.

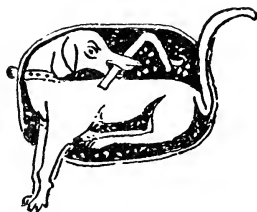
Research Work.

Finally must be mentioned the original research in pathology, without which any such department must become a lifeless and mechanical thing. It is no part of the business of the hospital as such to encourage or finance research, though it might well be argued that this should be one of its highest duties. As a matter of fact, no part of the expense attendant on research falls upon the hospital exchequer, save in so far as the building which it has erected is used by research workers.

The college, on the other hand, is enabled to promote research in virtue of certain scholarships which it holds in trust. Of these there are three—the Luther Holden, the Baly, and the Lawrence scholarships, of which the first two are in clinical surgery and medicine, and the last in pathology. The sole duty of the holders of these posts is to carry on research. Again, such bodies as the Royal Colleges, the British Medical Association, the Beit Foundation, and, above all, the Medical Research Council, afford scholarships or money grants for research work. Private munificence is responsible for some research posts, as with the Rose Fellowship tenable at St. Bartholomew's for research on lymphadenoma. All workers of this kind have been welcomed in the pathological department so far as space has been available for their accommodation. The officials of the department have been glad to afford such help and advice as they were in a position to give. Nothing is more helpful to the vitality of any scientific institution than to have within its walls a number of workers

engaged in gathering new facts, framing and testing new hypotheses, and striving after new refinements in technique. May the day be long distant when this vitalizing influence fails at St. Bartholomew's Hospital.

F. W. A.



FROM COK'S CARTULARY

THE ABERNETHIAN SOCIETY



THE Abernethian Society takes a high place amongst the students' societies which have done so much to foster accurate observation, power of debate, and *esprit de corps*. The oldest of such societies is the Edinburgh Royal Medical, which was founded in 1735; next in time is the Guy's Physical, established about 1775; and in the third place comes the Abernethian Society. Called at first the Medical and Philosophical Society of St. Bartholomew's Hospital, it was intended to be the common meeting-ground for past and present students and teachers who were to be brought together for the reading and discussion of papers on medical subjects, or such as had a direct bearing upon medicine. It also aimed at the formation of a library. The official staff of the society consisted of six presidents, a librarian and treasurer, and a secretary with a council. John Abernethy and Dr. Richard Powell were the mainstays of the society in its youth. Abernethy is well known. Dr. Powell became physician to the hospital. He was educated at Winchester and Pembroke College, Oxford, and "he was," says Sir Norman Moore, "the first to describe what is now called 'Bell's' palsy and to point out that gall-

stones may remain adherent to the gall bladder or fixed in its neck without doing much harm to the patient." James Macartney, who afterwards became Professor of Anatomy in the University of Dublin, was also one of the early presidents.

Abernethy appears to have been the most regular attendant at the meetings, and if there was ever a failure of material he could be relied upon either to start a subject for discussion or to bring forward an interesting case. The members paid a small subscription weekly; honorary members contributed a guinea towards the library fund, and from 1805 the staff made an annual donation for the purchase of books. In due course (Sir William) Lawrence became secretary and worked well with Abernethy—in whose house he lived as a pupil—to make the society successful. (Sir) Benjamin Brodie was also a member and read a paper on Animal Heat which seems to contain the germ of that which afterwards gained him the Copley Medal at the Royal Society. The society did good work for some years, but it gradually weakened, and from 1830 to 1832 the meetings appear to have been discontinued and its library was handed over to the medical school.

It was resolved on 23rd November 1832 that a society of the medical pupils of this hospital be founded and be called the "Abernethian Society." The new society worked under rules similar to those of its predecessor, and it became usual for the six presidents to be the three house physicians and the three house surgeons who then formed the whole junior staff. It was not until the session 1849-50 that the number of presidents was reduced to two. Some interesting communications

were soon brought before the society, foremost amongst them being one by (Sir James) Paget, then a first year's student. At a meeting held on 6th February 1835 he read a paper of which he afterwards wrote: "Another event in the first year's study, which had some influence on my later life was the discovery of the *Trichina spiralis*. My share was the detection of the 'worm' in its capsule; and I may justly ascribe it to the habit of looking out and observing and wishing to find new things which I had acquired in my previous studies of botany. All the men in the dissecting rooms, teachers included, 'saw' the little specks in the muscles, but I believe that I alone 'looked at' them and 'observed' them; no one trained in natural history could have failed to do so.

"The discovery had a memorable consequence in procuring me an introduction to Robert Brown. I wanted to examine the entozoon with a microscope, and there was not one in the hospital. I thought I might get help from Mr. Children, who was then chief of the Natural History Department of the British Museum and to whom someone had given me a letter of introduction. He, however, had no microscope; but suggested that 'Robert Brown might help me.' So we went at once to the little room in the museum in which the great botanist was at work among books and specimens; and I remember Mr. Children's first question: 'Brown, do you know anything about parasitic worms' and the answer, 'No, thank God.' But he let me look at my specimens with his little simple microscope—the same, I

think, that he had done his own grand work with—and I made the sketches of them with which to illustrate the paper read at the Abernethian Society. This was certainly the first account given of the new entozoon; but Owen, to whom the specimens were taken when I had seen that there was a 'worm,' read a paper on it at the Zoological Society and gave it its name." There must have been an outbreak of trichiniasis in London about this time for the condition had been noted by Hilton at Guy's and, writing to Sir William Hooker, Paget says: "The two subjects in which I have seen it were both very emaciated, and, as far as can be remembered, this was also the case in upwards of twenty others in which the same appearances have been noticed in our dissecting rooms, where they had been attributed to the deposition of small spicules of bone (which, indeed, they somewhat resemble)."

The presidential chair, costing fifty pounds, was bought during the session 1847-48, a year of great financial prosperity for the society. From 1850 to 1856 the Abernethian Society published a series of Transactions which contained the more important papers read during each session.

The society celebrated its centenary on 1st May 1895. Visitors on their arrival were received by the presidents at the top of the grand staircase and proceeded to the great hall where refreshments were served, and where the band of the Grenadier Guards played during the evening. The picture of Abernethy in the great hall was draped with flags, and in front of it was arranged a collection of letters and other

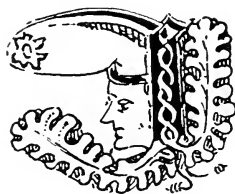
objects of interest in connection with Abernethy, chiefly lent by Mr. and Mrs. Alfred Willett, since Mrs. Willett was Abernethy's grand-daughter. Sir James Paget was present, personally congratulated the society and spoke of the address which he had given on the fiftieth anniversary of the foundation.

THE STUDENTS' UNION

The hospital clubs led an independent existence until 1892, and their prosperity depended entirely on the individual efforts of the members. In this year a scheme of amalgamation of the athletic clubs was arranged, and was placed under the control of a Central Finance Committee. In 1893 the amalgamated clubs undertook the publication of a monthly journal as the official organ, and in the following year the Abernethian Society joined the amalgamation. They were fortunate in being able to secure the grounds and pavilion at Winchmore Hill, which have been maintained ever since, and have undergone a continuous process of improvement as an athletic ground. In 1903 the plans for rebuilding the outpatient department were under consideration, and the opportunity was given for the provision of better accommodation for the students. A meeting was called with Dr. Eustace Talbot in the chair, and it was decided to form a students' union which should absorb and expand the work of the amalgamated clubs. The union is governed by a president, vice-presidents, treasurers, secretaries, and a representative

council consisting of persons elected by students engaged in clinical and pathological work, by students not yet engaged in such work, by the several committees of the various clubs and societies, and by the junior staff. The union continues its useful existence; it obtained proper accommodation when the new building was opened in 1907, and its organ, the *St. Bartholomew's Hospital Journal*, has now had an uninterrupted existence of thirty years.

D'A. P.



FROM COK'S CARTULARY



THE FUTURE

BY

H. J. WARING, M.S. LOND., F.R.C.S. ENG.

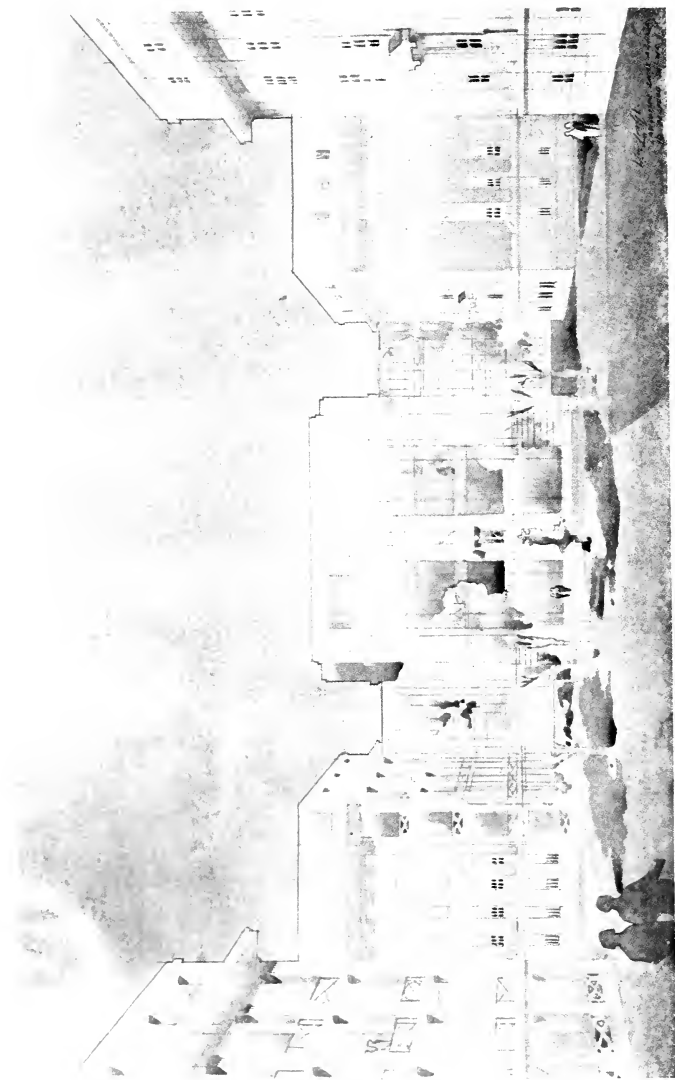
SURGEON TO THE HOSPITAL

AND

T. A. LODGE, A.R.I.B.A., L.F.S.I.

ARCHITECT





VIEW OF HOSPITAL SQUARE SEEN FROM THE NORTH, RECONSTRUCTED AND REBUILT
ACCORDING TO PLAN I



THE FUTURE

It should be understood that the following descriptions and the accompanying plans represent two possible schemes of reconstruction of the hospital. Modifications may be required in accordance with the changing needs.

At the present time the wards of St. Bartholomew's Hospital contain 687 beds for in-patients. These are located in four hospital blocks, three situated on the eastern, southern, and western sides of the main hospital square, and the fourth on the north-eastern extremity of the site. These four hospital blocks comprise 28 wards, each ward containing between 26 and 31 beds.

The beds at the present time are allocated as follows:

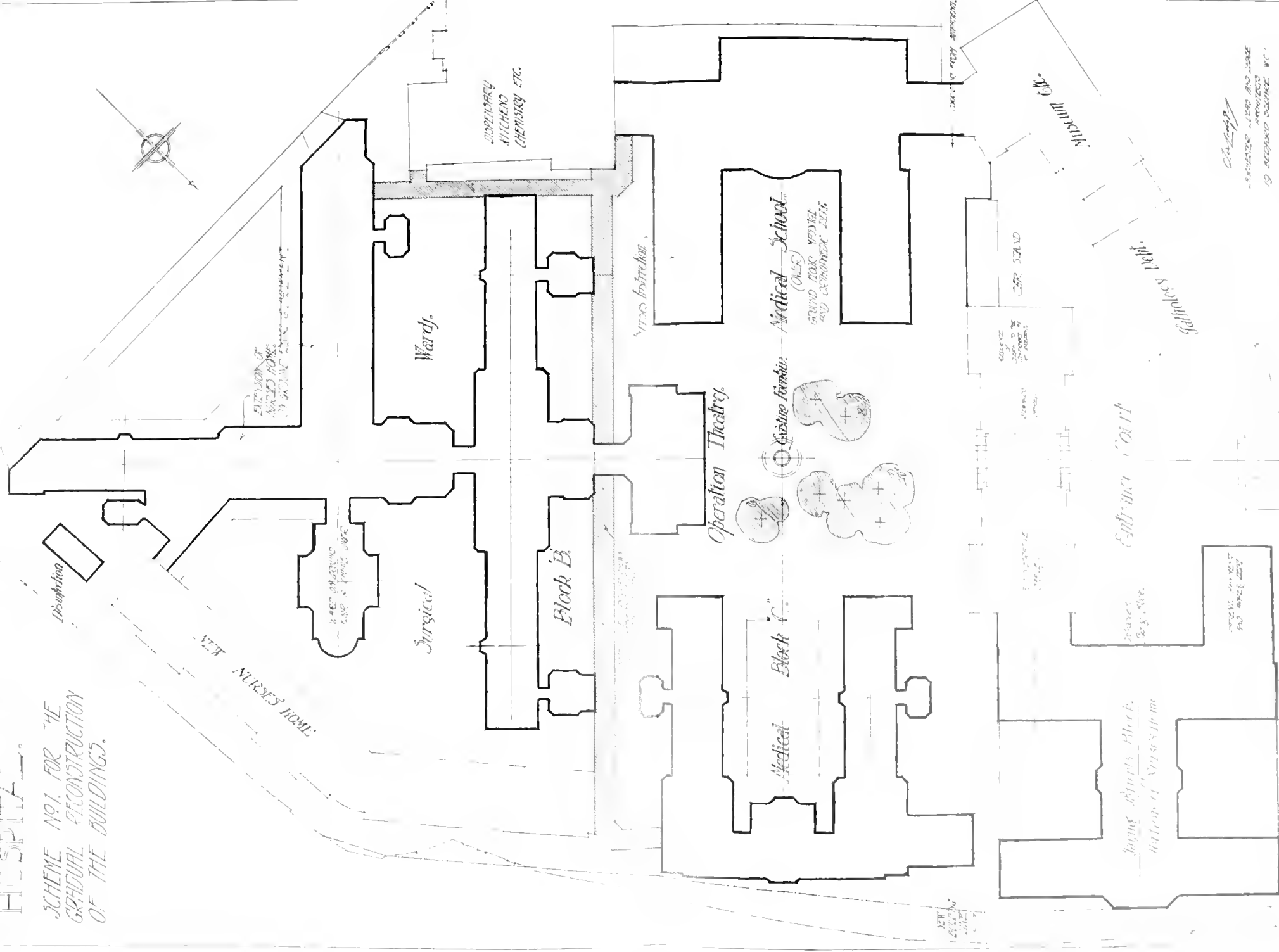
						Medical	Surgical
General Medical	...	...	...	...	...	240	
General Surgical	...	...	...	...	...		265
Obstetrical	...	...	...	...	...	31	
Maternity	...	...	...	...	...	16	
Ophthalmic	...	...	...	...	...		26
Skin	...	...	...	...	...	6	
Ear, Nose, and Throat	...	...	...	...	...		20
Septic	...	...	...	...	...		40
Isolation	...	...	...	...	...	9	
Orthopaedic	...	...	...	...	...		9
						<hr/> 302	<hr/> 360
				Total	...	662	
Observation (unassigned)	...	...	...	...	...	10	
Advanced Septic (unassigned)	...	...	...	...	...	15	
				Grand Total	...	<hr/> 687	

The department for venereal diseases is located at the special treatment centre in Golden Lane, and contains 10 beds for in-patients in addition to a large out-patient clinic.

It has been found, especially during the last two decades, that the accommodation for in-patients requires considerable improvements and additions, such as the provision of separate small rooms in connection with the large wards, improved and more accessible operation theatres, in order to avoid the carrying of patients across the open square to and from operation theatres, and clinical laboratories in connection with the present ward units, so that routine pathological examinations can be carried out on the spot. Many plans have been prepared during this period for the reconstruction of the present ward blocks in order to provide the required accommodation, and also to bring the ward units up to modern requirements. The method of construction of these ward blocks, however, and their location on the hospital site, have prevented a satisfactory solution of these necessities by reconstruction. Under these circumstances, it was decided to approach the question from the point of view of gradual reconstruction and rebuilding of the entire ward units of the hospital. Two lay-out plans have been prepared (between pages 148 and 149), each of which provides for a reconstructed hospital of 744 beds. In Plan I it has been assumed that it might not be necessary to house the whole of the nursing staff on the hospital site; in Plan II it has been assumed that accommodation should be provided for the

ST BARTHOLOMEW'S HOSPITAL

SCHEME NO. 1. FOR THE GRADUAL RECONSTRUCTION OF THE BUILDINGS.



GROUND FLOOR PLAN

Scale of Feet
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 160 170 180 190 200 210 220 230 240 250 260 270 280 290 300 310 320 330 340 350 360 370 380 390 400 410 420 430 440 450 460 470 480 490 500 510 520 530 540 550 560 570 580 590 600 610 620 630 640 650 660 670 680 690 700 710 720 730 740 750 760 770 780 790 800 810 820 830 840 850 860 870 880 890 900 910 920 930 940 950 960 970 980 990 1000

entire nursing and administrative staff. In Plan I, in addition to beds for 744 patients of the charitable class, accommodation is designed for paying patients. The portions of the site which have been allocated for the purpose of paying patients in this plan, if not used for this purpose, might be the site of a portion of the nurses' home, and would give sleeping accommodation for 350 nurses.

In Plan II there is no provision of accommodation for paying patients. In this connection it may be stated that the Medical Council of the hospital adopted the view that, if possible, accommodation for paying patients should be provided, and in the instructions given to the architect for the preparation of the plans such accommodation was asked for. It was stated also that if such accommodation were provided on the present site, it would not be possible to house the entire nursing staff. It is well known, moreover, that discussions have taken place on more than one occasion with the object of providing accommodation for a portion of the nursing staff away from the hospital. This information is given in order to explain the publication of two possible plans for the gradual reconstruction of the hospital.

When the hospital has been reconstructed and rebuilt, all modern and improved methods of diagnosis and treatment will be available for patients. In addition very considerable economy will be possible in administration, upkeep, and general working.

MEDICINE

Two hundred and thirty-four beds arranged in 10 wards, five male and five female, are allocated to general medicine. These are divided into five units—one Professorial and four non-Professorial. The Professorial unit contains 50 beds, and each non-Professorial unit 46 beds. The accommodation provided in each non-Professorial unit comprises :

1. One male ward—20 beds, with annexe for bath-room, lavatories, W.C., etc.
2. One female ward—20 beds, with annex as above.
3. Two two-bed wards.
4. Two single-bed wards.
5. Pathology room.
6. Demonstration room with dark room.
7. Ward offices :
 - (a) Kitchen.
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends.
 - (f) Sister's accommodation.

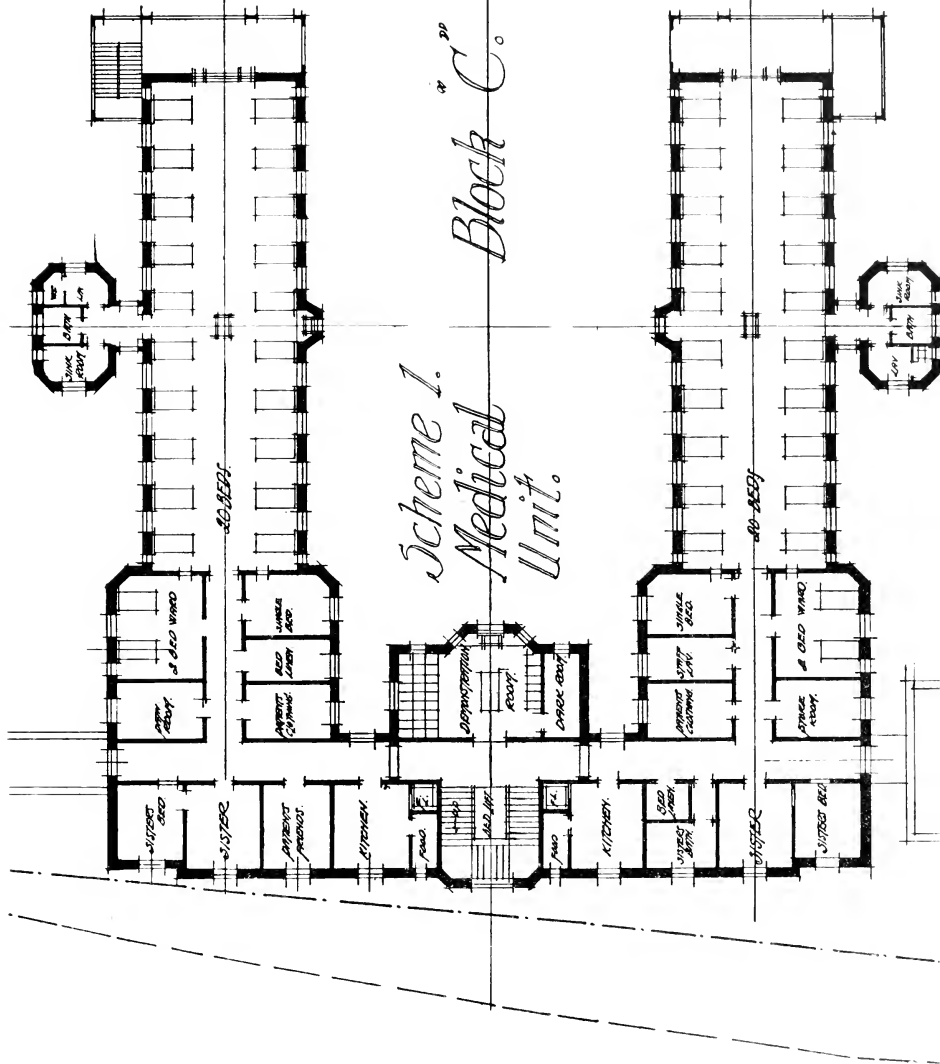


FIG. 35.

In the Professorial unit the accommodation is as follows :

1. One male ward—22 beds.
2. One female ward—22 beds.
3. Two two-bed wards.
4. Two single-bed wards.
5. Pathology room.
6. Demonstration room with dark room.
7. Ward offices :
 - (a) Kitchen
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends.
 - (f) Sisters' accommodation.

Off the centre of each main ward there is a sanitary annexe, containing bathroom, lavatories, etc.

At the end of each large ward there is a balcony and escape staircase. The wards allocated to the Professorial unit would have also special clinical pathological laboratories in connection with them, on the floor above. The accommodation in the laboratory comprises Professors' room, office, five smaller rooms, sterilizing room, animal room, and lavatory, together with benching accommodation for six in bacteriology, chemistry, and pathology. (See Figs. 35 and 36.)

SURGERY

Two hundred and fifty beds arranged in 10 wards, five male and five female, are allocated to general surgery. These are divided into five units—one Professorial and four non-Professorial. Each unit contains 50 beds, 25 male and 25 female. The accommodation provided in each unit comprises :

1. One male ward—22 beds.
2. One female ward—22 beds.
3. Two two-bed wards.
4. Two single-bed wards.
5. Pathology room and demonstration room with dark room.
6. Ward offices :
 - (a) Kitchen.
 - (b) Linen store.
 - (c) Room for dressings.
 - (d) Sister's accommodation.
 - (e) Food store.
 - (f) Patients' clothes store.
 - (g) Waiting room for patients' friends.

In the Professorial unit and in each non-Professorial unit the accommodation is as follows :

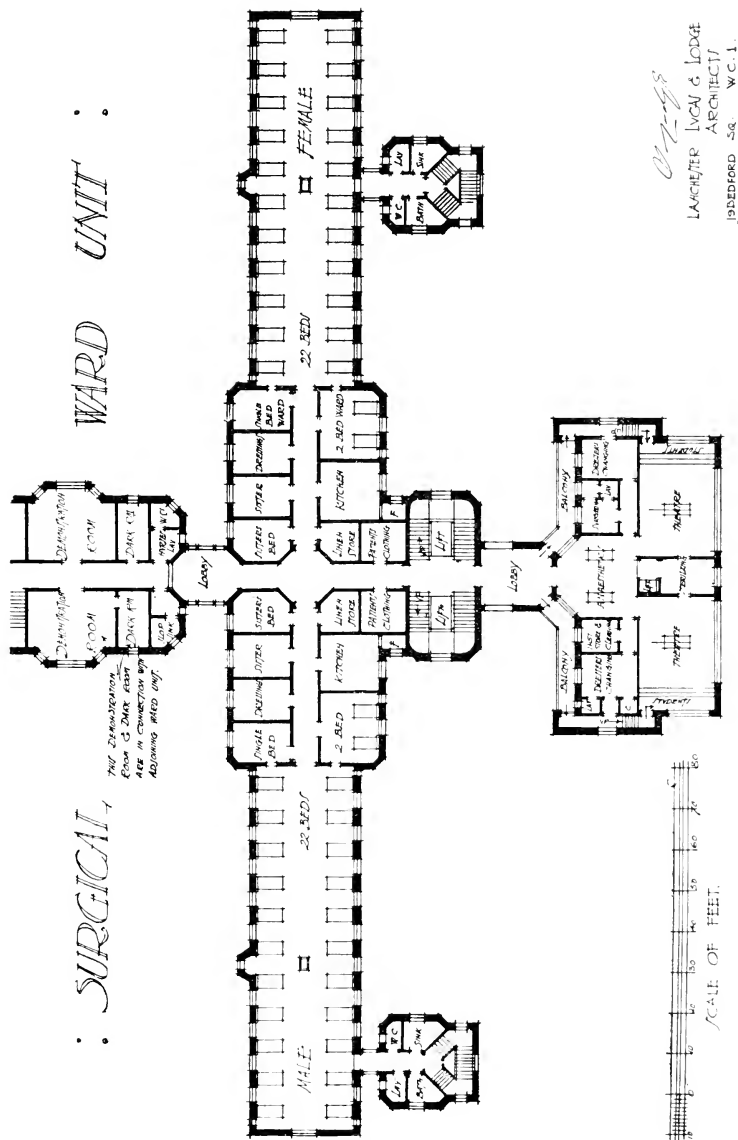


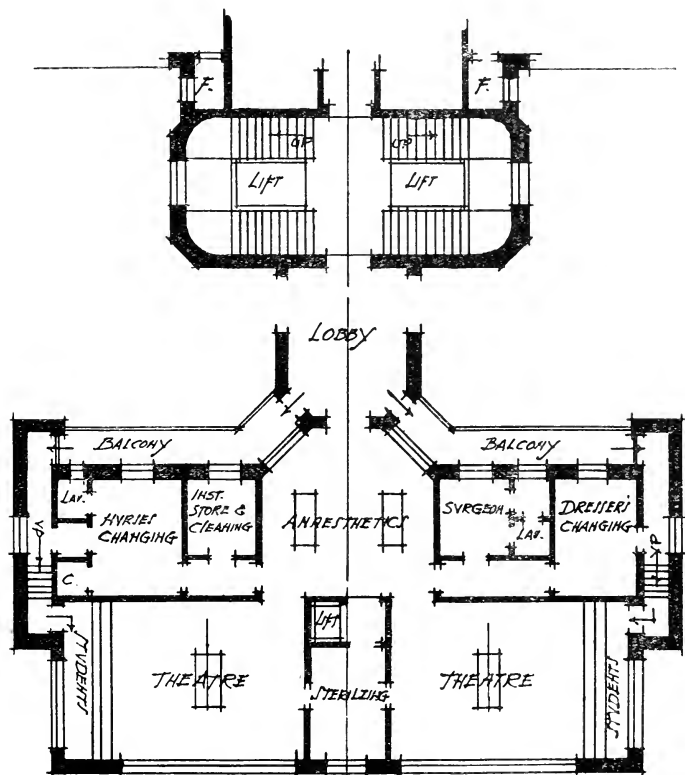
FIG. 37.

1. One male ward—22 beds.
2. One female ward—22 beds.
3. Two two-bed wards.
4. Two single-bed wards.
5. Pathology room.
6. Demonstration room with dark room.
7. Ward offices:
 - (a) Kitchen.
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends
 - (f) Sister's accommodation.

The wards allocated to the Professorial unit have also special clinical pathological laboratories in connection with them, located in immediate relation to the professorial medical laboratories. The accommodation in the laboratories comprises Professors' room, office, five smaller rooms, sterilizing room, dark room, animal room, and lavatory, together with benching accommodation for six in bacteriology, chemistry, and pathology. (See Fig. 37.)

OPERATION THEATRES.

SHOWING TWIN THEATRES ON EACH FLOOR



LANCHETTER, LYCAI & LODGE
ARCHITECTS
19 BEDFORD SQ. W.C.1.

FIG. 38.

OPERATION THEATRES

In connection with the surgical wards, and on the same levels, operation theatres are grouped together in one main central block arranged in five floors. The lowest floor, the basement, will be used for sterilizing and storage space. Two theatres are on each floor. Type "A" (Fig. 38) shows two twin theatres on each floor, with a central sterilizing room and lift connecting below with general sterilization rooms. Each theatre has provision for students in a gallery at the side, raised about six feet above the floor of the theatre. A common anaesthetic room is provided, and also a room for surgeons, a room for nurses, a room for dressers, and an instrument store and cleaning room. Access to all the changing rooms is from an outside balcony, and after changing the staff enter the clean portion of the theatre. All the changing rooms in this scheme are common to both theatres.

In type "B" (Fig. 39) the same accommodation is provided, but each theatre has its own anaesthetic room and rooms for surgeons, dressers, and nurses. The same arrangement for entering the theatre from a balcony is also proposed in this plan.

Architectural floor plan of the first floor of a building. The plan is oriented with the entrance at the top. Key areas include a central lobby, two sets of stairs and lifts, two theatres, two anaesthetic rooms, two dressers, two stores, and two restrooms. Dimensions are provided for most rooms and corridors.

Rooms and Dimensions:

- THEATRE (Left):** 20'0" wide, 12'0" deep. Includes a **REST. ST.** (Restroom) and a **STAIR.** (Staircase).
- ANAEETHIC SUR.** (Anaesthetic Room): 14'0" wide, 9'0" deep.
- DRESSER** (Dresser): 10'0" wide, 9'0" deep.
- STORE** (Store): 10'0" wide, 9'0" deep.
- REST.** (Restroom): 10'0" wide, 9'0" deep.
- THEATRE (Right):** 20'0" wide, 12'0" deep. Includes a **REST. ST.** (Restroom) and a **STAIR.** (Staircase).
- ANAEETHIC SUR.** (Anaesthetic Room): 14'0" wide, 9'0" deep.
- DRESSER** (Dresser): 10'0" wide, 9'0" deep.
- STORE** (Store): 10'0" wide, 9'0" deep.
- REST.** (Restroom): 10'0" wide, 9'0" deep.
- LOBBY:** Central area with stairs and lifts.
- STAIRS AND LIFT:** Located on the left side of the lobby.
- STAIRS AND LIFT:** Located on the right side of the lobby.
- STUDENTS:** Two areas labeled "STUDENTS" are shown, each 20'0" wide.

FIG. 39.

OBSTETRICS AND GYNAECOLOGY

The Obstetric and Gynecological and Ante-Natal Department will be housed on one floor, and will comprise accommodation for 65 in-patients. The general lay-out of the proposed buildings for this department is illustrated in Fig. 40.

The accommodation provided comprises :

1. OBSTETRICS :

- (a) Ward of 22 beds with annexe for bathroom, lavatories, W.C., etc.
- (b) Small ward of two beds.
- (c) Small one-bed ward.
- (d) Babies' bathroom.
- (e) Kitchen.
- (f) Linen store.
- (g) Room for patients' clothing.
- (h) Store room for dressings, etc.
- (i) Labour theatre and subsidiary rooms in connection therewith.
- (j) Sister's accommodation.

2. GYNAECOLOGY :

- (a) Ward of 22 beds with annexe containing bathroom, lavatories, W.C., etc.
- (b) Small ward of two beds.

FIFTH FLOOR

FIVE NATURAL BEDS

M

- (c) Small one-bed ward.
- (d) Operation theatre and subsidiary rooms in connection therewith.
- (e) Linen store.
- (f) Room for patients' clothing.
- (g) Room for dressings, etc.
- (h) Kitchen.
- (i) Sister's accommodation.

3. ANTE-NATAL:

- (a) Ward of 15 beds.

On the same floor and in direct connection with the wards of this unit there are also:

- (a) Pathology room.
- (b) Demonstration room with dark room.

In addition, it is proposed to allocate ten beds in the Septic Department to septic gynaecological and obstetric patients.

WARDS FOR SEPTIC CASES

Three complete ward units each containing 25 beds with the necessary accessory accommodation will be allocated to this department. The accommodation provided will comprise :

1. Three large wards each containing 22 beds, two being for male patients and the other for female patients, each with annexe containing bathroom, lavatories, W.C., etc.
2. Three two-bed wards.
3. Three single-bed wards.
4. Operation theatre.
5. Pathology room and demonstration room.
6. Ward offices :
 - (a) Kitchen.
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends.
 - (f) Sister's accommodation.

Ten beds are allocated in this department for septic gynaecological and obstetric cases.

OPHTHALMIC DEPARTMENT

A complete ward unit of 25 beds with the necessary accessory accommodation will be allocated to this department. The accommodation provided will comprise :

1. One large ward of 22 beds divided into two separate portions, each containing 11 beds, one portion being for male patients and the other for female patients ; with annexe containing bathroom, lavatories, W.C., etc.
2. One two-bed ward.
3. One single-bed ward.
4. Operation theatre.
5. Pathology room and demonstration room.
6. Ward offices :
 - (a) Kitchen.
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends.
 - (f) Sister's accommodation.

DEPARTMENT FOR DISEASES OF THE EAR, THROAT, AND NOSE

A complete unit of 40 beds, including 10 beds for adenoid patients, with the necessary accessory accommodation will be allocated to the department for Diseases of the Ear, Throat, and Nose. The accommodation provided will comprise :

1. Two large wards of 20 beds each, one being for male patients, and the other for female patients ; with annexe containing bathroom, lavatories, W.C., etc.
2. Operation theatre.
3. Pathology and demonstration rooms.
4. Ward offices :
 - (a) Kitchen.
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends.
 - (f) Sister's accommodation.

ORTHOPAEDIC DEPARTMENT

A complete ward unit of 25 beds with the necessary accessory accommodation will be allocated to this department. The accommodation provided will comprise :

1. One large ward of 22 beds divided into two separate portions, each containing 11 beds, one portion being for male patients and the other for female patients ; with annexe containing bathroom, lavatories, W.C., etc.
2. One two-bed ward.
3. One single-bed ward.
4. Operation theatre.
5. Pathology room and demonstration room.
6. Ward offices :
 - (a) Kitchen.
 - (b) Food store.
 - (c) Linen store.
 - (d) Patients' clothes store.
 - (e) Waiting room for patients' friends.
 - (f) Sister's accommodation.

It is also proposed to provide additional accommodation for the treatment of orthopaedic out-patients, in direct connection with the out-patient block.

DEPARTMENT FOR DISEASES OF THE SKIN

Twelve beds with the necessary accessory accommodation will be allocated to the department for diseases of the skin. The accommodation provided will comprise :

One ward of 12 beds divided into two separate portions, each containing 6 beds, one being for male patients and the other for female patients; with annexe containing bathroom, lavatories, W.C. etc.

[ISOLATION WARD: *see page 180*]

DEPARTMENT FOR PAYING PATIENTS

Owing to recent economic conditions, and the arrangements which have been made by which practically all in-patients who are in a position to do so make a contribution to the general funds of the hospital for their maintenance and nursing, it has been suggested by the Medical Council of the Hospital that a Department for Paying Patients should be established either on a portion of the site of the present hospital if possible, or, if not, on land immediately adjacent. In plan No. I which has been suggested for the

gradual reconstruction and rebuilding of the hospital, a portion of the site has been allocated either for a portion of the new nurses' home, or as a possible paying patients' department. Alternative plans have been provided, which show how this portion of the site may be advantageously utilized for either purpose.

PAYING PATIENTS' DEPARTMENT (GROUND FLOOR)

The accommodation provided on the ground floor in the proposed Paying Patients' block is shown in detail in Fig. 41. This comprises :

1. Two single rooms for patients.
2. Sitting, reading, and recreation rooms for lady patients.
3. Billiard room and accessory offices for male patients.
4. General Administrative offices :
 - (a) Steward.
 - (b) Clerk.
 - (c) Secretary.
 - (d) Medical Common room.
 - (e) Consulting room.
 - (f) " "
 - (g) " "

PAYING PATIENTS' DEPARTMENT
(FIRST FLOOR)

The accommodation provided on this floor consists of :

1. Fourteen single bedrooms.
2. One small ward of 4 beds.
3. Dining room for male patients.
4. Dining room for female patients.
5. Bathrooms, kitchens, and accessory offices.

The rooms on this floor may be utilized for other male or female patients.

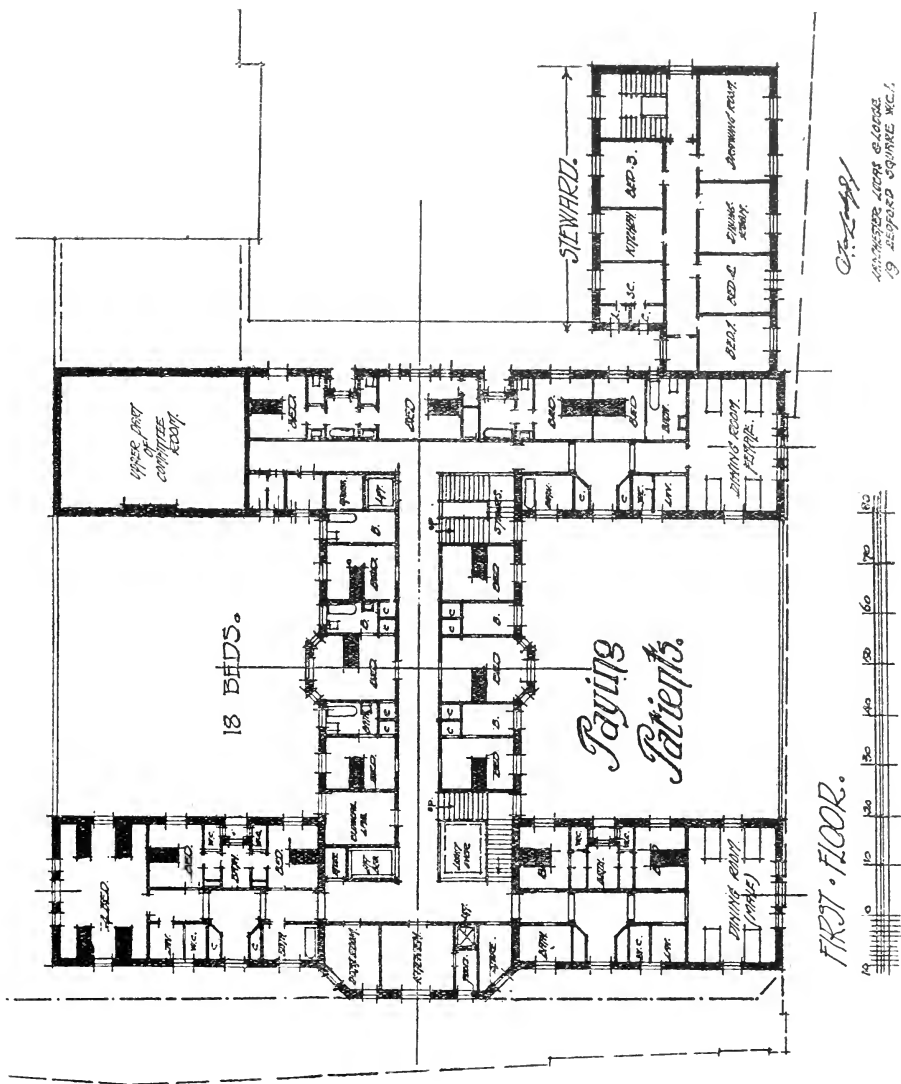


Fig. 42.

PAYING PATIENTS' DEPARTMENT
(SECOND FLOOR)

The accommodation provided on this floor comprises :

1. Three four-bed wards.
2. One two-bed ward.
3. Sixteen single rooms.
4. Bathrooms, store rooms, kitchen, and accessory offices.

The rooms on this floor are intended to be used for medical patients.

PAYING PATIENTS' DEPARTMENT
(THIRD FLOOR)

This floor is allocated to Maternity and Gynaecological patients. The accommodation comprises :

1. Three four-bed wards.
2. Two two-bed wards.
3. Ten single rooms.

On this floor are also situated :

- (a) Labour theatre.
- (b) Waiting room.
- (c) Babies' bathroom.
- (d) Kitchen, bathrooms, and accessory offices.

PAYING PATIENTS' DEPARTMENT
(FOURTH FLOOR)

The fourth floor, which is intended in the main for surgical patients, comprises accommodation similar to that on the second floor.

PAYING PATIENTS' DEPARTMENT
(FIFTH FLOOR)

The fifth floor is allocated to the nursing staff, and comprises accommodation for 25 nurses.

1. Twenty-five single bedrooms.
2. Nurses' dining room.
3. Nurses' sitting room.
4. Nurses' recreation room.
5. Bathrooms, etc.

PAYING PATIENTS' DEPARTMENT

(SIXTH FLOOR)

The sixth floor contains :

1. Two operation theatres with accessory sterilizing and anaesthetic rooms, etc.
2. Seven rooms for staff.
3. Sister's accommodation.

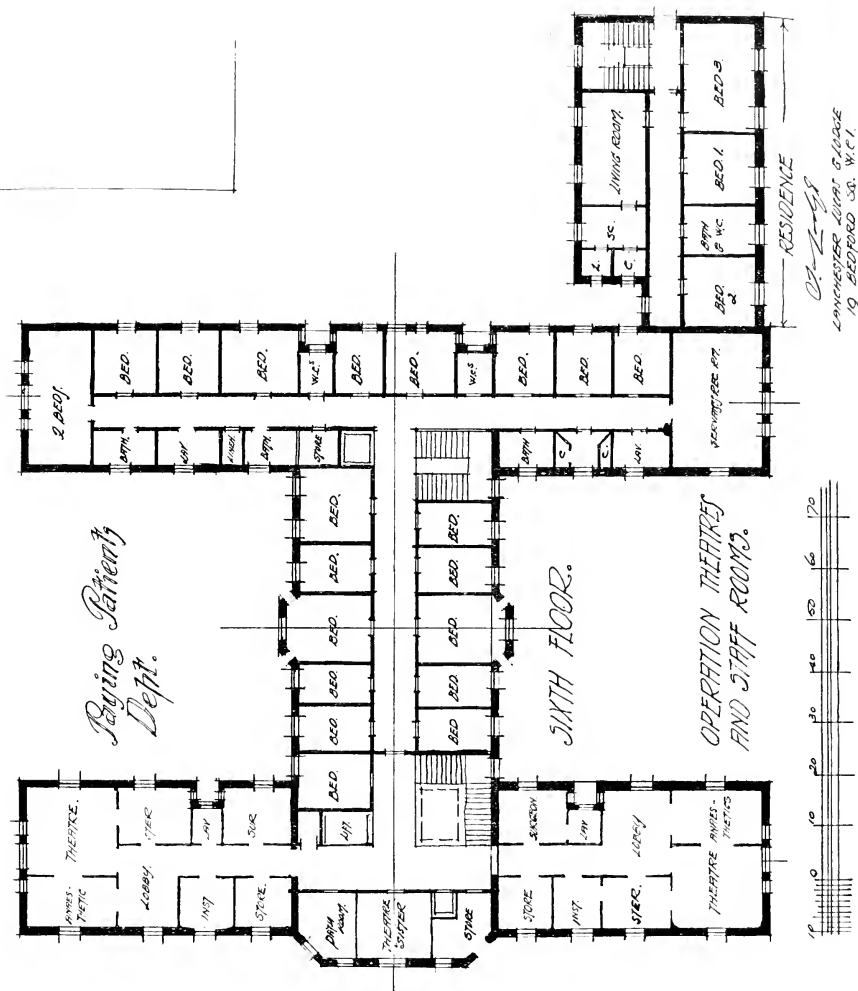


FIG. 46.

ISOLATION WARD

A small unit for patients who require immediate isolation is provided on the top floor of the medical block (Block C in Plan I). This unit will contain accommodation for eight cases (Fig. 47).

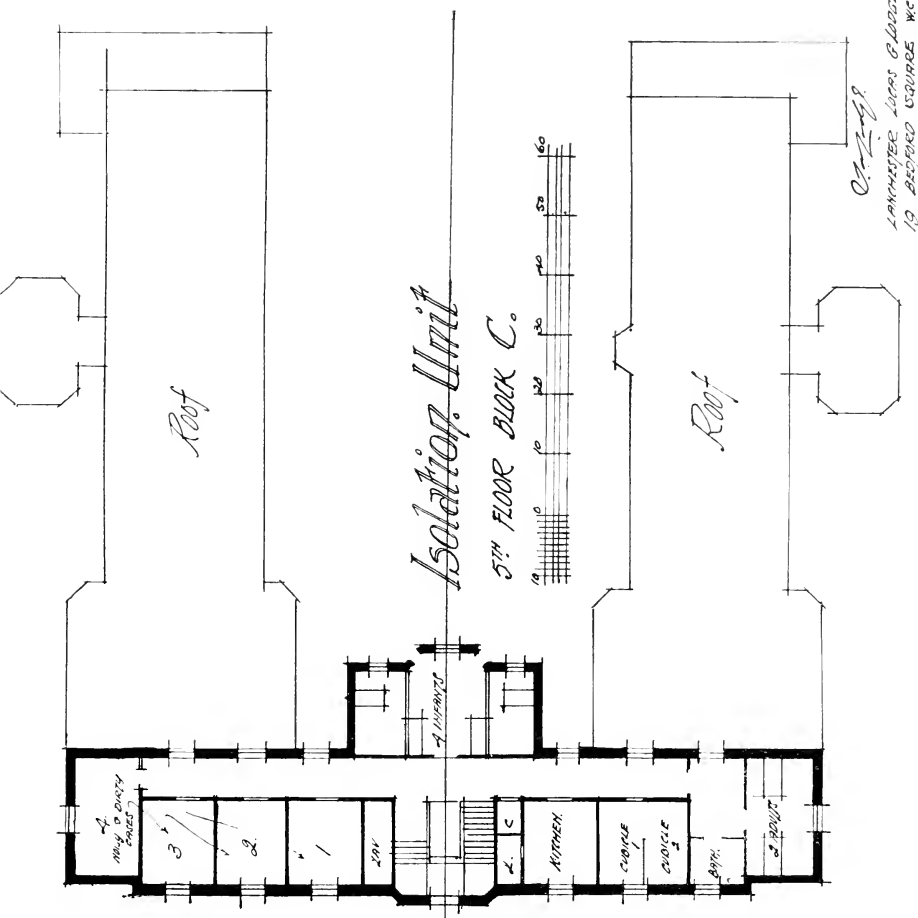
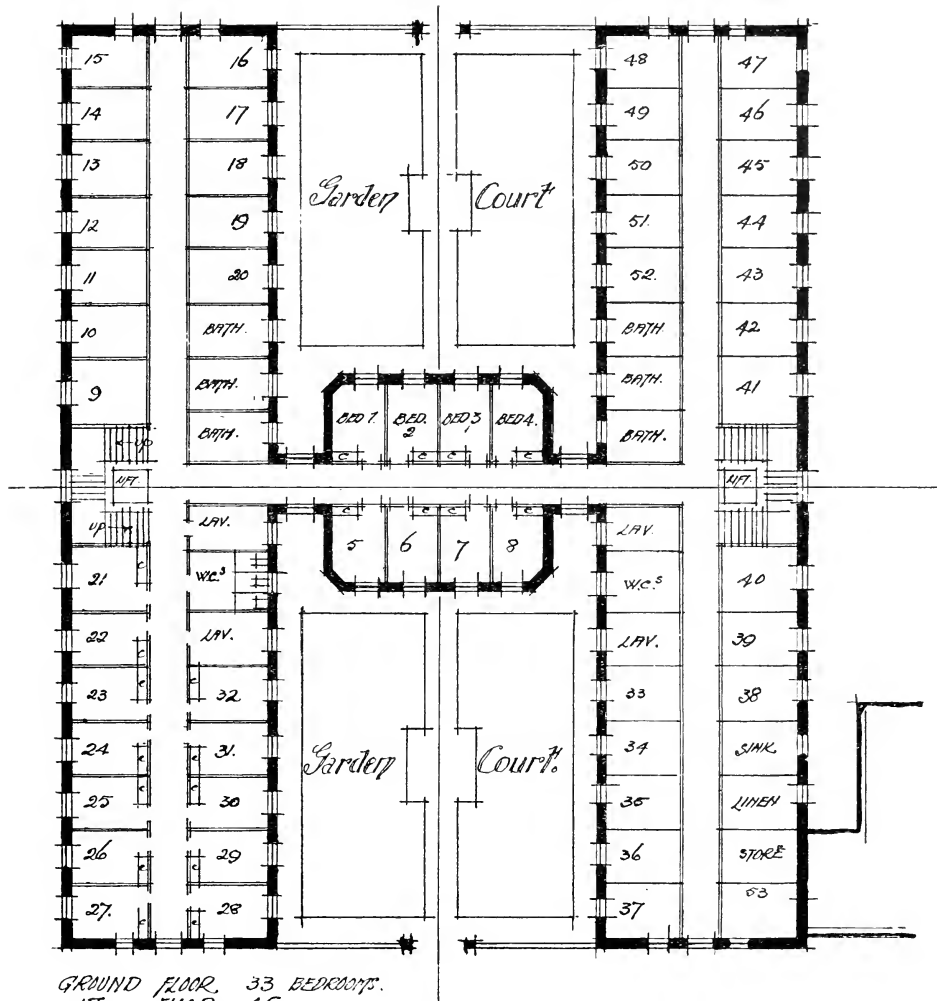


FIG. 47.

ACCOMMODATION FOR NURSES

(QUEEN MARY'S HOME FOR ST. BARTHOLOMEW'S HOSPITAL
NURSES)

If plan No. 1 is finally adopted and it is found necessary to house the whole of the nursing staff on the hospital site, a portion of the site which has been suggested as a possible location for a Paying Patient Department would be utilized for the erection of a portion of the Nurses' Home. Fig. 48 shows one floor of the new Home, and the accommodation available. The details show that sleeping accommodation for 343 nurses would be possible.



GROUND FLOOR.	33 BEDROOMS.
1ST FLOOR.	45 "
2ND "	53 "
3RD "	53 "
4TH "	53 "
5TH "	53 "
6TH "	53 "
TOTAL	343 "

FIG. 48.

SCALE 1/16" = 1 FOOT
FLOORS 2, 3, 4, 5, 6

W. J. P. J.
LANCHESTER LUTHER CHURCH.
19 BEDFORD SQ. W.C.H.

MEDICAL SCHOOL

In connection with the general reconstruction of the Hospital, it has been considered desirable to work out in detail plans for the rebuilding of a portion of the Medical School. This is rendered necessary owing to the increased number of students who come to St. Bartholomew's, and the increased accommodation which is necessary to provide for the requirements of a modern scientific medical education.

The new building which it is proposed to construct would occupy the present site of the lecture theatres and anatomical department.

MEDICAL SCHOOL (GROUND FLOOR)

The accommodation provided on the ground floor would comprise:

1. Nurses' instruction rooms.
2. Rooms for the massage department.

MEDICAL SCHOOL (FIRST FLOOR)

The proposed accommodation comprises (Fig. 49):

1. Chemical laboratories, lecture theatre, and accessory rooms.
2. General lecture theatre.
3. Laboratories and rooms for the Department of Public Health.

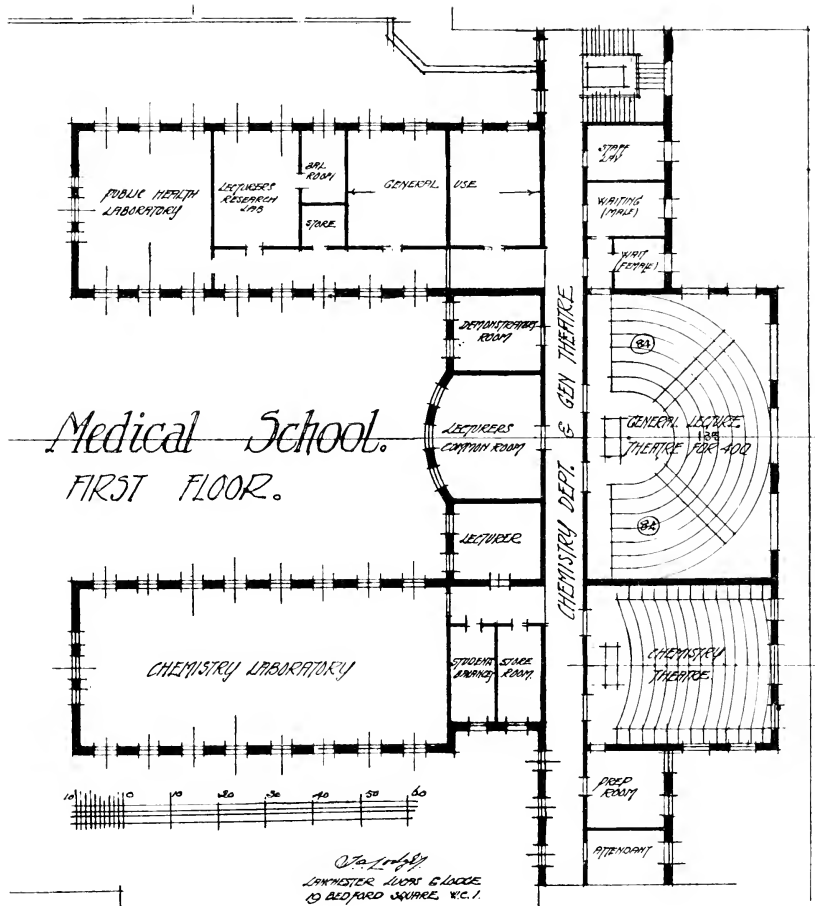


FIG. 49.

MEDICAL SCHOOL

(SECOND FLOOR)

The accommodation on this floor consists of (Fig. 50):

1. Physics laboratory, physics theatre, and accessory rooms in connection therewith.
2. Operative Surgery room.
3. Accessory rooms in connection with the Operative Surgery Department.

MEDICAL SCHOOL
(THIRD FLOOR)

The accommodation on this floor comprises (Fig. 51) :

1. Laboratories for :
 - (a) Chemical Physiology.
 - (b) Experimental Physiology.
2. Physiological lecture theatre.
3. Lecture and accessory rooms in connection with the physiological department.

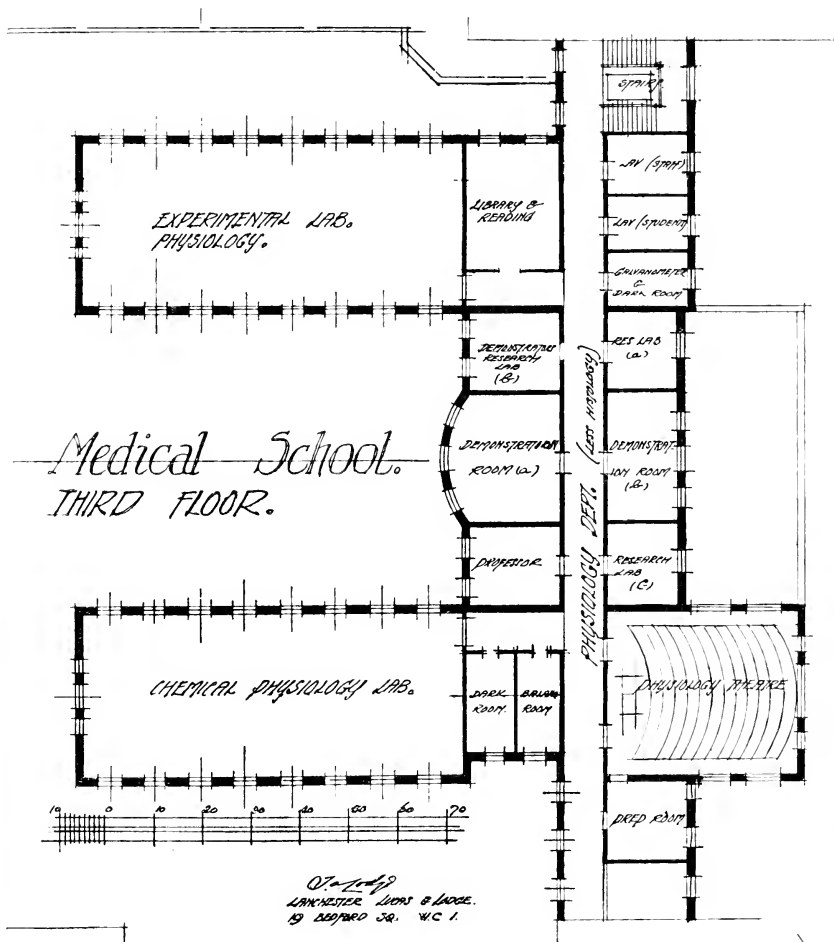


FIG. 51.

MEDICAL SCHOOL
(FOURTH FLOOR)

The accommodation on this floor comprises (Fig. 52) :

1. Histological laboratory and accessory preparation rooms.
2. Dissecting room, anatomical museum, and accessory demonstration and preparation rooms.
3. Anatomical lecture theatre.

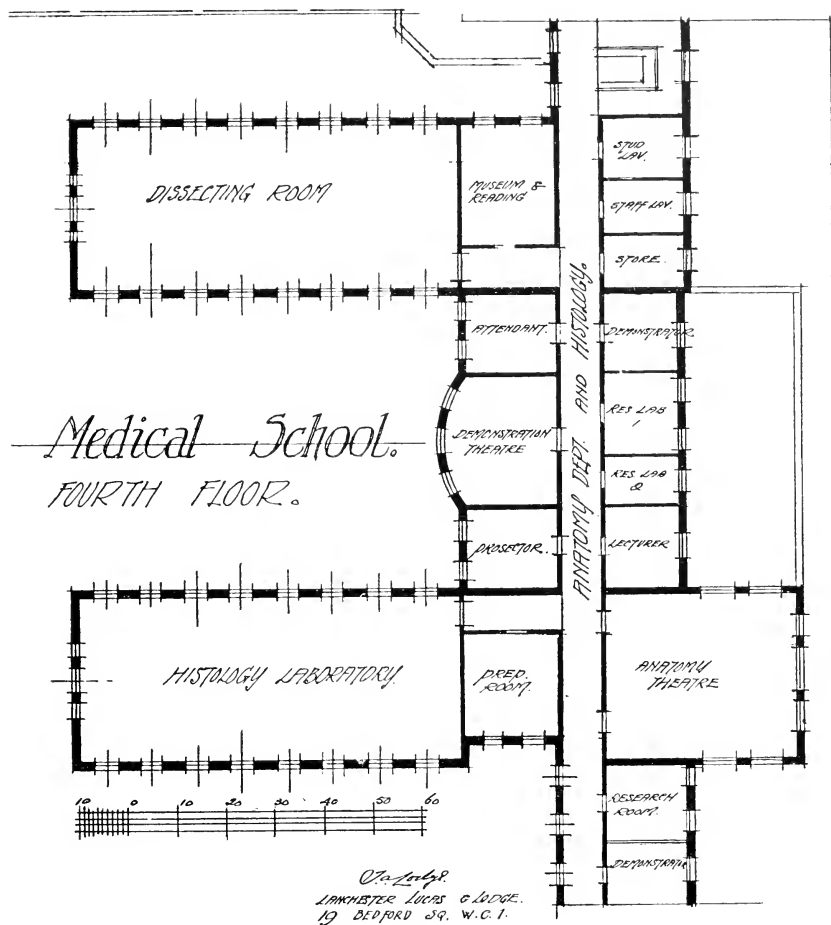


FIG. 52.



FROM COK'S CARTULARY



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1123-1923 A.D.

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June 2nd 1923.

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has been handed to me, & will to say
that copies of the striking of the thirpice
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Mr. Geoffrey Keynes - M.R.C.S.
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